

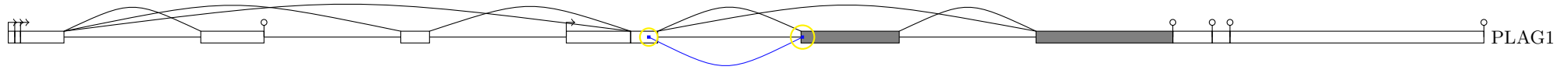
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C. Jac	aaagccag	gttcgtatggaa...2489...atatttttggtttgtctctc	TGTTCTgTCTGTCAG	GatAATAt
M. Mus	aaagccag	gttcgtatggaa...3099...atatttttggtttgttctc	TGTTCTgTCTGTCAG	GatAATAt
R. Nor	aaagccag	gttcgtatggaa...2736...atatttttggtttgtctctc	TGTTCTgTCTGTCAG	GatAATAt
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O. Cun	aaagccag	gttcgtatggaa...3235...atatttttggtttgtctctc	TGTTCTgTCTGTCAG	GatAATAt
C. Fam	aaagccag	gttcgtatggaa...2470...atatttttggtttgtctctc	TGTTCTgTCTGTCAG	GatAATAt
B. Tau	aaagccag	gttcgtatggaa...2031...atatttttggtttgtctctc	TGTTCTgTCTGTCAG	GatAATAt
E. Cab	aaagccag	gttcgtatggaa...2158...atatttttggtttgtctctc	TGTTCTgTCTGTCAG	GatAATAt
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P. Tro	tcttcagg	gtaagtgtttac...4942...ttgcaccttaccttgattat	GTGTTCCCTGttACAG	GgAGAAcA
P. Abe	tcttcagg	gtaagtgtttac...4942...ttgcaccttaccttgattat	GTGTTCCCTGttACAG	GgAGAAcA
C. Jac	tcttcagg	gtaagtgtttac...4942...ttgcaccttaccttgattat	GTGTTCCCTGttACAG	GgAGAAcA
M. Mus	tcttcagg	gtaagtgtttac...4942...ttatgtctcaacttaattct	GTGTTCCCTGttACAG	GgAGAAcA
R. Nor	tcttcagg	gtaagtgtttac...4942...ttatgtctcagcttaattct	GTGTTCCCTGttACAG	GgAGAAcA
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B. Tau	tcttcagg	gtaagtgtttac...4942...ttacatctcaccttgattat	ATGTTCCCTGttACAG	GgAGAAcA
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Figure 1: CS=6.24



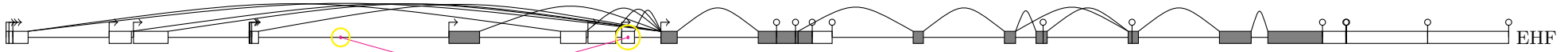
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R. Mac	tttcatag	attggccaaaatgggaaggattggattccactctcttccacgaagagtcaat	GGGACTGGctAAGAtcAAAGtcTGAGG	-cttttccatctataatcag	gtatgcat									
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R. Nor	ctttgtag	attggccaaaatgggaaggattggattctgctctcttccacgaagagttaat	GGGACTGGctAAGAtcAAAGtcTGAGG	-cttttccatcactaatcag	gtatgcat									
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E. Cab	tttcatag	attggccaaaatgggaaggattgaattccgctctcttccacgaagagtcaat	GGGACTGGctAAGAtcAAGGtcTGAGG	-cttttccatctgtcatcag	gtatgcat									
S. Sus	ttccgtag	attggccacaatgggaaggaccgattccgctctcttccacgaagagtcaat	GGGACTGGctAAGAtcAAGGtGtGAGGC	-ttttccatctgtcatcag	gtatgcat									
L. Afr	tttccag	attggccaaaatgggaaggattggattctgctctcttccacgaagagtcaat	GGGACTGGctAAGAtcAAAGtcTGAGA	-cttttccactgccatcag	gtatgcat									
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P. Tro	gtaatcag	gtatgcattgaa...2654...--ttagttacaaactagttggt	TCTTA--TTTTTTTTCCAG	TCCCtttt
P. Abe	gtaatcag	gtatgcattgaa...2652...--ttagttacaaactagttggt	TCTTA--TTTTTTTTCCAG	TCCCtttt
C. Jac	ataatcag	gtatgcattgaa...2742...--ttagttacaaactagttggt	TCTTA--TTTTTTTTCCAG	TCCCtttt
R. Nor	ctaatacag	gtatgcattgaa...4119...--ttagttacaaactagttggt	TCTTA--TTTTTTTTCCAG	TCCCtttt
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O. Cun	gcagtcag	gtatgcattgaa...2414...----tagttacaaactagttggt	TCTTA--TTTTTTTTCCAG	TCCCtttt
C. Fam	gtcatcag	gtatgcattgaa...2490...--ttagttacaaactagttggt	TCTTA--TTTTTTTTCCAG	TCCCtttt
B. Tau	atcatcag	gtatgcattgaa...2883...--ctagttacaaactagttggt	TCTTA--TTTTTTTTCCAG	TCCCtttt
E. Cab	gtcatcag	gtatgcattgaa...2480...--ttagttacaaactagttggt	TCTTA--TTTTTTTTCCAG	TCCCtttt
S. Sus	gtcatcag	gtatgcattgaa...2640...aatctagttacaaactagtt	GTTTCTTA--TTTTTTTTCCAG	TCCCtttt
L. Afr	gccatcag	gtatgcattgaa...2549...--ttagttacaaactagttggt	TCTTA--TTTTTTTTCCAG	TCCCtttt
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Figure 3: CS=6.24



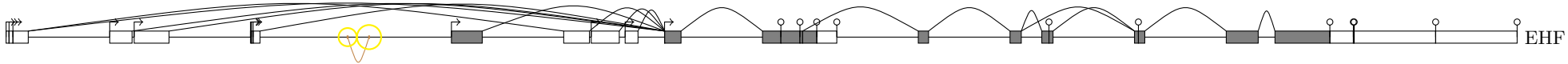
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P. Tro	tgatcaga	gattattcatttatgaatGGGTGgCTGTaaAAACttGCCT	catgcatatgaaaattgaacctggaaa-tttttaattgct-	gtgagttt
P. Abe	tgatcaga	gattattcatttatgaatGGGTGgCTGTaaAAACttGCCT	catgcatatgaaaattgaacctggaaa-tttttaattgct-	gtgagttt
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M. Mus	tgatcaga	gattattcatttatgaatGGGTGgCTGTaaAAACttGCCT	catgcatatgaaaattgaacctggaaa-attttaattgcc-	atgagttt
C. Por	tgatcaga	gattattcatttatgaatGGGTGgCTGTaaAAACttGCCT	taatcatatgaaaattgaacctggaaa-tttttgattgct-	gtcgttc
O. Cun	tgatcaga	gattattcatttatgaatGGGTGgCTGTaaAAACttGCCT	catgcatatgaaaattgaacctggata-tttttaattgccg	ttgagtt-
C. Fam	tgatcaga	gattattcatttatgaatGGGTGgCTGTaaAAACttGCCT	catgcatatgaaagtgaacctggaaa-tttttaattgcc	gtgagttt
B. Tau	cgatcaga	gattattcatttatgaatGGGTGgCTGTaaAAACttGCCT	catgcatatgaaaattgaacctggaaa-tttttaattgcc	gtcagttt
E. Cab	cgatcaga	gattattcatttatgaatGGGTGgCTGTaaAAACttGCCT	catacatatgaaaattgaacctggaaa-tttttaattgcc	gggagttt
S. Sus	tgatcaga	gattattcatttatgaatGGGTGgCTGTaaAAACttGCCT	catgcatatgaaaattgaacctggaaa-tttttaattgcc	gtgagttt
L. Afr	tgatcagg	gtttcttcatttatgaatGGGTGgCTGTaaAAACttGCCT	catgcatatgaaaatcgaacctggaaa-tttttaattgcc	ataagct-
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Figure 5:



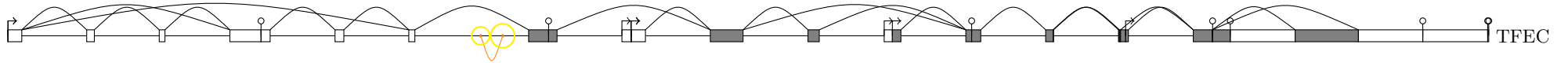
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L. Afr	gcagcagg	gtaagtggctcct...3147...caccgcgc--ccttcctggc	GTGAGG	GTATGTGCCT	TGGACT	acatcgtggaagccagcacc-...176...tctctttcctag	ggctacat
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id=332498 gene=ENSG00000196739 name=COL27A1 segment=chr9.116968577_116971954.1 type=IN

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R. Mac	gcagcagg	gtaagtggttcc...3197...-cgtggaagccagcaccatgc	AGTCCA	GGGCATATAC	CTTGC	ctcaaggcctatgtcatcga...131...tctctttcctag	ggctacat
P. Tro	gcagcagg	gtaagtggttcc...2085...-cgtggaagccagcaccatgc	AGTCCA	GGGCATATAC	CTTGC	ctcaaggcctatgtcatcga...131...tctctttcctag	ggctacat
P. Abe	gcagcagg	gtaagtggttcc...3229...-cgtggaagccagcaccatgc	AGTCCA	GGGCATATAC	CTTGC	ctcaaggcctatgtcatcga...131...tctctttcctag	ggctacat
C. Jac	gcagcagg	gtaagtggttcc...3077...-cgtggaagccagcaccatgc	AGTCCA	GGGCATATAC	CTTGC	ctcaaggcctatgtcatcga...131...tctctttcctag	ggctacat
M. Mus	gcagcagg	gtaagtgccttt...2132...-cgtggaagccagcaccatgc	AGTCCA	GGGCATATAC	CTTGC	ctcaaggcctatgtcatcga...99...tctctttcctag	ggctacat
R. Nor	gcagcagg	gtaagtgccttt...2064...-cgtggaagccagcaccatgc	AGTCCA	GGGCATATAC	CTTGC	ctcaaggcctatgtcatcga...100...tctctttcctag	ggctacat
C. Por	gcagcagg	gtaagtggctcct...2111...-cgtggaagccagcaccatgc	AGTCCA	GGGCATATAC	CTTGC	ctcaaggcctatgtcatcga...128...tctctttcctag	ggctacat
O. Cun	gcagcagg	gtaagtggctcct...2059...-cgtggaagccagcaccatgc	AGTCCA	GGGCATATAC	CTTGC	ctcaaggcctatgtcatcga...120...tctctttcctag	ggctacat
C. Fam	gcagcagg	gtaagtggctcct...2456...-cgtggaagccagcaccatgc	AGTCCA	GGGCATATAC	CTTGC	ctcaaggcctatgtcatcga...125...tctctttcctag	ggctacat
F. Cat	gcagcagg	gtaagtggctcct...2644...-cgtggaagccagcaccatgc	AGTCCA	GGGCATATAC	CTTGC	ctcaaggcctatgtcatcga...127...tctctttcctag	ggctacat
B. Tau	gtagccgg	gtaagtggctcct...3016...-cgtggaagccagcaccatgc	AGTCCA	GGGCATATAC	CTTGC	ctcaaggcctatgtcatcga...136...tctctttcctag	ggctacat
S. Sus	gcagcagg	gtaagtggctcct...2716...-cgtggaagccagcaccatgc	AGTCCA	GGGCATATAC	CTTGC	ctcaaggcctatgtcatcga...127...tctctttcctag	ggctacat
L. Afr	gcagcagg	gtaagtggctcct...3194...-cgtggaagccagcaccatgc	AGTCCA	GGGCATATAC	CTTGC	ctcaaggcctatgtcatcga...129...tctctttcctag	ggctacat
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id=332498 gene=ENSG00000196739 name=COL27A1 segment=chr9.116968577_116971954.1 type=IN VIEW

Figure 6: CS=13.44



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R. Mac	tataaaag	gttggtataata...548...	attttaataatacttgcacac	TGAGAGc	AAGAGt	GGGTGA	ac	AGAAa	ACAG	actgttttattaaccagca...	333...	atccactaa-tag	tgagaaga
P. Tro	agtaaaag	gtatgcagtttt...635...	-ttttaataatacttgcacact	GAGAGc	AAGAGt	GGGTGA	ac	AGAAa	ACAG	actgttttattaaccagca...	334...	atccactaa-tag	tgagaaga
P. Abe	aataaaaa	gtatgcagtttt...638...	attttaataatacttgcacac	TGAGAGc	AAGAGt	GGGTGA	ac	AGAAa	ACAG	actgttttattaaccagca...	338...	atccactaa-tag	tgagaaga
C. Jac	aataaaag	gttggtatgata...549...	--tttaataatacttgcacact	AGAGc	AAGAGt	GGGTGA	ac	AGAAa	ACAG	actgttttattaaccagca...	335...	atccactaa-tag	tgagaaga
C. Por	cagaaaag	gttgacatgaca...543...	-----atacttgcacactgagagca	AGAA	tg	GGTGA	ac	AGAAa	ACAG	actgttttattaaccagca...	344...	atccactaa-tag	tgagaagc
O. Cun	aagaaaag	gttggtatgata...537...	-ttttaataatacttgcacact	GAGAGc	AAGAGt	GGGTGA	ac	AGAAa	ACAG	actgttttattaaccagca...	354...	actcactaa-tac	agagaaga
C. Fam	aagcaaag	gtagtatatct...536...	-ttttaataatacttgcacact	GAGAGc	AAGAGt	GGGTGA	ac	AGAAa	ACAG	actgttttattaaccagca...	346...	atccattaa-tag	tggaaga
B. Tau	aagcaaag	gttggtatgata...566...	attttaataatacttgcacac	TGAGAGc	AAGAGt	GGGTGA	ac	AGAAa	ACAG	actgttttattaaccagca...	348...	aatcattaa-tag	tgaaaaga
E. Cab	aagcaaag	attggtacgatg...538...	-ttttaataatacttgcacact	GAGAGc	AAGAGt	GGGTGA	ac	AGAAa	ACAG	actgttttattaaccagca...	338...	atctattaa-tgg	tgagaaga
S. Sus	aagcaaag	gttggtatgata...540...	-ttttaataatacttgcacact	GAGAGc	GAGAGt	GGGTGA	ac	AGAAa	ACAG	actgttttattaaccagca...	343...	atctgtag-tag	tgagaaga
O. Avi	aagcaaag	gttggtatgata...572...	-----tatacttgcacactgtgagc	AAGAGt	GGGTGA	ac	AGAAa	ACAG	actgttttattaaccagca...	359...	aatcattaa-tag	tgaaaaga	
L. Afr	aagcaaag	gttggtatgata...540...	-ttttaataatacttgcacact	GAGAGc	AAGAGt	GGGTGA	ac	AGAAa	ACAG	actgttttattaaccagca...	354...	-tccactaaatag	tgagaaga

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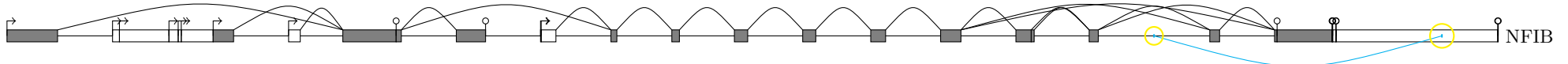
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R. Mac	tataaaag	gttggtataata...733...	aattgtagctgaatgccaa	CTGTTTCTc	TCATCTTTTTTTTT	-----	aactgaacattaagaatta	...	152...	atccactaa-tag	tgagaaga	
P. Tro	agtaaaag	gtatgcagtttt...819...	aattgtagctgaatgccaa	CTGTTTCTc	TCATCTTTTTTTTT	-----	ttaactgaacattaagaa	----	153...	atccactaa-tag	tgagaaga	
P. Abe	aataaaaa	gtatgcagtttt...823...	aattgtagctgaatgccaa	CTGTTTCTc	TCATCTTTTTTTTT	-----	actgaacattaagaattac	...	155...	atccactaa-tag	tgagaaga	
C. Jac	aataaaag	gttggtatgata...732...	aattgtagctgaatgccaa	CTGTTTCTc	TCATCTTTTTTTTT	-----	gtaaatggaacattaagaa	----	156...	atccactaa-tag	tgagaaga	
C. Por	cagaaaag	gttgacatgaca...720...	aattgtagctgaatgccaa	CTGTTTCTc	TCATCTTTT	-----	atatttaactcgagcatta	-----	170...	atccactaa-tag	tgagaagc	
O. Cun	aagaaaag	gttggtatgata...721...	aattgtagctgaatgccaa	CTGTTTCTc	TCATCTTTTTTTTT	TTTTTTTTTTT	caaaactg	-----	172...	actcactaa-tac	agagaaga	
C. Fam	aagcaaag	gtagtatatct...720...	aattgtagctgaatgccaa	CTGTTTCTc	TCATCTTTTTTTTT	-----	tttaaaacttgagcattaa	-----	165...	atccattaa-tag	tggaaga	
B. Tau	aagcaaag	gttggtatgata...751...	aattgtagctgaatgccaa	CTGTTTCTc	TCATCTTTTTTTTT	TTTTTT	-----	actgagcattaagaattgc	...	164...	aatcattaa-tag	tgaaaaga
E. Cab	aagcaaag	attggtacgatg...722...	aattgtagctgaatgccaa	CTGTTTCTc	TCATCTTTTTTTTT	-----	ttaacttgagcattaagaat	----	157...	atctattaa-tgg	tgagaaga	
S. Sus	aagcaaag	gttggtatgata...723...	aattgtagctgaatgccaa	CTGTTTCTc	TCATCTTTTTTTTT	-----	ttaaactgaacattaagaa	----	163...	atctgtag-tag	tgagaaga	
O. Avi	aagcaaag	gttggtatgata...750...	aattgtagctgaatgccaa	CTGTTTCTc	TCATCTTCTCTT	---	cttctttttttttt	taact	-----	181...	aatcattaa-tag	tgaaaaga
L. Afr	aagcaaag	gttggtatgata...724...	aattgtagctgaatgccaa	CTGTTTCTc	TCATCTTTTTTTTT	TTTTTTTTTTT	ttttt	taactgaacgtta	-----	172...	-tccactaaatag	tgagaaga

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id=516817 gene=ENSG00000105967 name=TFEC segment=chr7_115750981_115752045_-1 type=IN VIEW

Figure 7:



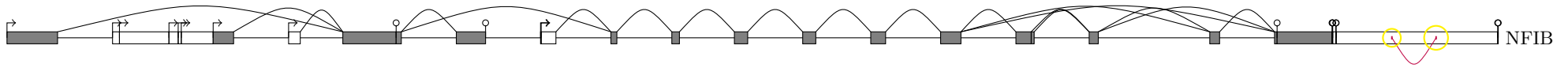
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R. Mac	agcaacag	gtgggcaagttt...4883...	gccatgtacagtactagttt	GCATGt	GTTCAATTTA	aaataactaaaaactgtagtac...27...	ttcaattgacag	ctgaggat
P. Tro	agcaacag	gtgggcaagttt...4883...	gccatgtacagtactagttt	GCATGt	GTTCAATTTA	aaataactaaaaactgtagtac...27...	ttcaattgacag	ctgaggat
P. Abe	agcaacag	gtgggcaagttt...4883...	gccatgtacagtactagttt	GCATGt	GTTCAATTTA	aaataactaaaaactgtagtac...27...	ttcaattgacag	ctgaggat
C. Jac	agcaacag	gtgggcaagttt...4883...	gccatgtacagtactagttt	GCATGt	GTTCAATTTA	aaataactaaaaactgtagaac...27...	ttcaattgacag	ctgaggat
M. Mus	agcaacag	gtgggcacgttt...4884...	gccatgttcagtactagttt	GCATGt	GTTCAATTTA	aaataactaaaaactgtagtac...26...	ttcaattgacag	ctgaggat
R. Nor	agcaacag	gtgggcacgttt...4884...	gccatgttcagtactagttt	GCATGt	GTTCAATTTA	aaataactaaaaactgtagtac...26...	ttcaattgacag	ctgaggat
C. Por	agcaacag	gtgggcaagttt...4883...	gccatatacagtactagttt	GCATGt	GTTCAATTTA	aaataactaaaaactgtagtac...27...	ttcaattgacag	ctgaggat
O. Cun	agcaacag	gtgggcaagttt...4883...	gccatatacagttctagttt	GCATGt	GTTCAATTTA	aaataactaaaaactgtagtac...27...	ttcaattgacag	ctgaggat
C. Fam	agcaacag	gtgggcaagttt...4883...	gccatgtacaactactagttt	GCATGt	GTTCAATTTA	aaataactaaaaactgtagtac...27...	ttcaattgacag	ctgaggat
E. Cab	agcaacag	gtgggcaagttt...4883...	gccatgtacagtactagttt	GCATGt	GTTCAATTTA	aaataactaaaaactgtagtac...27...	ttcaattgacag	ctgaggat
S. Sus	agcaacag	gtgggcacgttt...4883...	gccatgtacagtactagttt	GCATGt	GTTCAATTTA	aaataactaaaaactgtagtac...27...	ttcaattgacag	ctgaggat
L. Afr	agcaacag	gtgggcaagttt...4883...	gccatgtacaactactagttt	GCATGt	GTTCAATTTA	aaataactaaaaactgtagtac...27...	ttcaattgacag	ctgaggat
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id=381447 gene=ENSG00000147862 name=NFIB segment=chr9_14102510_14112997_-1 type=IN

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R. Mac	a	aaaa	gaaaaa-aggaaaaaa...	4936...	tgcaaaaactgttt-aaacaa	TAAAaTGAGCTATGC	tacaga	ctctggcc
P. Tro	a	aaaa	gaaaaa-aggaaaaaa...	4936...	tgcaaaaactgttt-aaacaa	TAAAaTGAGCTATGC	tacaga	ctctggcc
P. Abe	a	aaaa	gaaaaa-aggaaaaaa...	4936...	tgcaaaaactgttt-aaacaa	TAAAaTGAGCTATGC	tacaga	ctctggcc
C. Jac	a	aaaa	gaaaaa-aggaaaaaa...	4936...	tgcaaaaactgttt-aaacaa	TAAAaTGAGCTATGC	tacaga	ctctggcc
M. Mus	a	aaaa	gaaaaataggaaaaa-	4936...	-gcaaaaactgtttaaaacaa	TAAAaTGAGCTATGC	tacaga	ctctggcc
R. Nor	-	aaaa	gaaaactaggaaaaaa...	4936...	tgcaaaaactgttt-aaacaa	TAAAaTGAGCTATGC	tacaga	ctctggcc
C. Por	a	aaaa	agaaaa-aaaaaaaaa...	4936...	tgcaaaaactgttt-aaacaa	TAAAaTGAGCTATGC	tacaga	ctctggcc
O. Cun	a	aaaa	gaaaaa-agaaaaaaa...	4936...	tgcaaaaactgttt-aaacaa	TAAAaTGAGCTATGC	tacaga	ctcgggcc
C. Fam	a	aaaa	gaaaaa-agaaaaaaa...	4936...	tgcaaaaactgttt-aaacaa	TAAAaTGAGCTATGC	tacaga	ctctggcc
E. Cab	a	aaaa	gaaaaa-aggaaaaaa...	4936...	tgcaaaaactgttt-aaacaa	TAAAaTGAGCTATGC	tacaga	ctctggcc
S. Sus	a	aaaa	gaaaaa-aaaaaaaaa...	4936...	tgcaaaaactgttt-aaacaa	TAAAaTGAGCTATGC	tacaga	ctcgggcc
L. Afr	a	gaaa	aaaaaa-aggaaaaaa...	4936...	tgcaaaaactgttt-aaacaa	TAAAaTGAGCTATGC	tacaga	ctctggct
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id=381456 gene=ENSG00000147862 name=NFIB segment=chr9_14081847_14087567_-1 type=E3 VIEW

Figure 8:



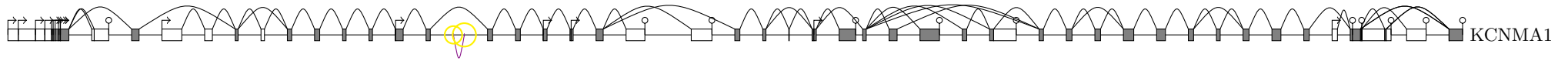
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P. Tro	a	aaaa	gaaaaaaggaaaaa...4481...caactgtaggtgacgagtag	TCAGTtATTGcTTGC	tagctacacaccagggtga...429...ctatgctacaga	ctctggcc
P. Abe	a	aaaa	gaaaaaaggaaaaa...4481...caactgtaggtgacgagtag	TCAGTtATTGcTTGC	tagctacacaccagggtga...429...ctatgctacaga	ctctggcc
C. Jac	a	aaaa	gaaaaaaggaaaaa...4481...caactgtaggtgacgagtag	TCAGTtATTGcTTGC	tagctacacaccagggtga...429...ctatgctacaga	ctctggcc
R. Nor	a	aaag	aaaactagggaaaaa...4478...caactgtaggtgacgagtag	TCAGTtATTGcTTGC	tagctacacaccagggtga...432...ctatgctacaga	ctctggcc
C. Por	a	aaaa	agaaaaaaaaaaaa...4482...caactgtaggtgacgagtag	TCAGTtATTGcTTGC	tagctacacaccagggtga...428...ctatgctacaga	ctctggcc
O. Cun	a	aaaa	gaaaaaagaaaaaa...4482...caactgtaggtgacgagtag	TCAGTtATTGcTTGC	tagctacacaccagggtga...428...ctatgctacaga	ctctggcc
C. Fam	a	aaaa	gaaaaaagaaaaaa...4483...caactgtaggtgacgagtag	TCAGTtATTGcTTGC	tagctacacaccagggtga...427...ctatgctacaga	ctctggcc
F. Cat	a	aaaa	gaaaaaaggaaaaa...4481...caactgtaggtgacgagtag	TCAGTtATTGcTTGC	tagctacacaccagggtga...429...ctatgctacaga	ctctggcc
E. Cab	a	aaaa	gaaaaaaggaaaaa...4483...caactgtaggtgacgagtag	TCAGTtATTGcTTGC	tagctacacaccagggtga...427...ctatgctacaga	ctctggcc
S. Sus	a	aaaa	ggaaaaaaaaaaaa...4481...caactgtaggtgacgagtag	TCAGTtATTGcTTGC	tagctacacaccagggtga...429...ctatgctacaga	ctctggcc
L. Afr	a	gaaa	aaaaaaggaaaaa...4482...caactgtaggtgacgagtag	TCAGTtATTGcTTGC	tagctacacaccagggttaa...428...ctatgctacaga	ctctggct
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id=381456 gene=ENSG00000147862 name=NFIB segment=chr9_14081847_14087567_-1 type=E3

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R. Mac	a	aaaa	gaaaaaaggaaaaa...4883...tgctagcagctgctcatact	GCAGtCAATtACTGG	aaagcgatataatttcctatg...27...ctatgctacaga	ctctggcc
P. Tro	a	aaaa	gaaaaaaggaaaaa...4883...tgctagcagctgctcatact	GCAGtCAATtACTGG	aaagcgatataatttcctatg...27...ctatgctacaga	ctctggcc
P. Abe	a	aaaa	gaaaaaaggaaaaa...4883...tgctagcagctgctcatact	GCAGtCAATtACTGG	aaagcgatataatttcctatg...27...ctatgctacaga	ctctggcc
C. Jac	a	aaaa	gaaaaaaggaaaaa...4883...tgctagcagctgctcatact	GCAGtCAATtACTGG	aaagcgatataatttcctatg...27...ctatgctacaga	ctctggcc
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C. Por	a	aaaa	agaaaaaaaaaaaa...4883...tgctagcagctgctcatact	GCAGtCAATtACTGG	aaagcgatataatttcctatg...27...ctatgctacaga	ctctggcc
O. Cun	a	aaaa	gaaaaaagaaaaaa...4883...tgctagcagctgctcatact	GCAGtCAATtACTGG	aaagcgatataatttcctatg...27...ctatgctacaga	ctctggcc
C. Fam	a	aaaa	gaaaaaagaaaaaa...4883...tgctagcagctgctcatact	GCAGtCAATtACTGG	aaagcgatataatttcctatg...27...ctatgctacaga	ctctggcc
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Figure 9:



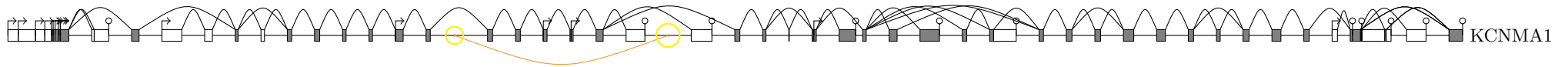
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O. Cun	ggaagaaa	gtaagtacgccg...4468...tcaagccacacattagccac	CCTG	TAAAAGTCCG	ctttcttacacacaaaatca...442...tctcctgttcag	gcacattg	
C. Fam	ggaagaaa	gtaagtatgcca...4472...tcaagccgcacattagccac	CCTG	TAAAAGTCCG	ctttcttacacacaaaatca...438...tctcctgttcag	gcacattg	
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O. Avi	ggaagaaa	gtaagtatgcca...4471...tcaagccgcacattagccac	CCTG	TAAAAGTCCG	ctttcttacacacaaaatca...439...tttccccttcag	gcacatcg	
*****	*****	***** * *	*** **	*****	*****	* ** * **	*** ** *

id=413406 gene=ENSG00000156113 name=KCNMA1 segment=chr10_78850269_78868238_-1 type=IN

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R. Mac	ggaagaaa	gtaagtatgcca...4701...aaaccacttggccaacaggt	TGGGCTTTTA	TAGG	atatttgtgcagcatcaggtg...209...tctcctgttcag	gcacattg	
P. Tro	ggaagaaa	gtaagtatgcca...4701...aaaccacttggccaacaggt	TGGGCTTTTA	TAGG	atatttgtgcagcatcaggtg...209...tctcctgttcag	gcacattg	
P. Abe	ggaagaaa	gtaagtatgcca...4701...aaaccacttggccaacaggt	TGGGCTTTTA	TAGG	atatttgtgcagcatcaggtg...209...tctcctgttcag	gcacattg	
C. Jac	ggaagaaa	gtaagtatgaca...4702...aaaccacttggccaacaggt	TGGGCTTTTA	TAGG	atatttgtgcagcatcaggtg...208...tctcccgttcag	gcacattg	
M. Mus	ggaagaaa	gtaagtatgcca...4721...aaaccacttggccaagtggt	TGGGCTTTTA	TAGG	atatttgtgcagcatcaggtg...190...tctcctgtacag	gcacattg	
R. Nor	ggaagaaa	gtaagtatgcca...4702...aaaccacttggccaagtggt	TGGGCTTTTA	TAGG	atatttgtgcagcatcaggtg...208...tctcctgtacag	gcacattg	
C. Por	ggaagaaa	gtaagtatgcca...4710...aaaccacttggccaacaggt	TGGGCTTTTA	TAGG	atatttgtgcagcatcaggtg...202...tctcctgtcag	gcacattg	
O. Cun	ggaagaaa	gtaagtacgccg...4704...aaaccacttggccaacaggt	TGGGCTTTTA	TAGG	atatttgtgcagcatcaggtg...206...tctcctgttcag	gcacattg	
C. Fam	ggaagaaa	gtaagtatgcca...4708...aaaccacttggccaacaggt	TGGGCTTTTA	TAGG	atatttgtgcagcatcaggtg...202...tctcctgttcag	gcacattg	
F. Cat	ggaagaaa	gtaagtatgcca...4708...aaaccacttggccaacaggt	TGGGCTTTTA	TAGG	atatttgtgcagcatcaggtg...202...tctcctgttcag	gcacattg	
B. Tau	ggaagaaa	gtaagtatgcca...4709...aaaccacttggccaacaggt	TGGGCTTTTA	TAGG	atatttgtgtagcatcaggtg...201...tttcttattcag	gcacatag	
E. Cab	ggaagaaa	gtaagtatgcca...4710...aaaccacttggccaacaggt	TGGGCTTTTA	TAGG	atatttgtgcagcatcaggtg...200...tctcccattcag	gcacattg	
O. Avi	ggaagaaa	gtaagtatgcca...4707...aaaccacttggccaacaggt	TGGGCTTTTA	TAGG	atatttgtgtagcatcaggtg...203...tttccccttcag	gcacatcg	
*****	*****	***** * *	* *****	* * *****	*****	* ** * **	*** ** *

id=413406 gene=ENSG00000156113 name=KCNMA1 segment=chr10_78850269_78868238_-1 type=IN VIEW

Figure 10:



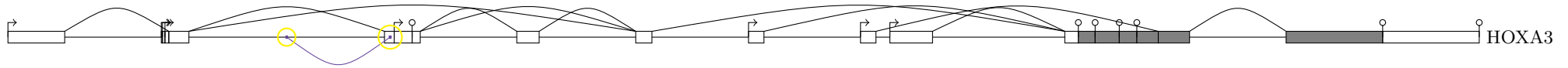
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P.Tro	ggaagaaa	gtaagtatgcca...4485...	cctgataaaagtctgctttc	TTACac	ACAAa	ATCAT	cgtttcagcaagatttgta...424...	tctcctgttcag	gcacattg
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M.Mus	ggaagaaa	gtaagtatgcca...4504...	cctgataaaagtccctctttc	TTACac	ACAAa	ATCAT	cgtttcagcaagatttgta...405...	tctcctgtacag	gcacattg
R.Nor	ggaagaaa	gtaagtatgcca...4486...	cctgataaaagtcgcctttc	TTACac	ACAAa	ATCAT	cgtttcagcaagatttgta...423...	tctcctgtacag	gcacattg
C.Por	ggaagaaa	gtaagtatgcca...4492...	cctgataaaagtcgcctttc	TTACac	ACAAa	ATCAT	cgtttcagcaagatttgta...417...	tctcctctgcag	gcacattg
O.Cun	ggaagaaa	gtaagtacgccg...4488...	cctgataaaagtcgcctttc	TTACac	ACAAa	ATCAT	cgtttcagcaagatttgta...421...	tctcctgttcag	gcacattg
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F.Cat	ggaagaaa	gtaagtatgcca...4492...	cctgataaaagtcgcctttc	TTACac	ACAAa	ATCAT	cgtttcagcaagatttgta...417...	tctcctgttcag	gcacattg
B.Tau	ggaagaaa	gtaagtatgcca...4493...	cctgataaaagtcgcctttc	TTACac	ACAAa	ATCAT	cgtttcagcaagatttgta...416...	tttcttattcag	gcacatag
E.Cab	ggaagaaa	gtaagtatgcca...4494...	cctgataaaagtcgcctttc	TTACac	ACAAa	ATCAT	cgtttcagcaagatttgta...415...	tctcccattcag	gcacattg
O.Avi	ggaagaaa	gtaagtatgcca...4491...	cctgataaaagtcgcctttc	TTACac	ACAAa	ATCAT	cgtttcagcaagatttgta...418...	tttccccttcag	gcacatcg
L.Afr	ggaagaaa	gtaagtatgcca...4495...	---ggtaaaagtcgcctttc	TACACAa	AATCAT	cgtttcagcaagatttgta...417...	tttcccattcag	gcacattg	gcacattg
*****	*****	***** * *		* *****	*****	*****		* **	* ** *

id=413406 gene=ENSG00000156113 name=KCNMA1 segment=chr10.78850269.78868238.-1 type=IN

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P.Tro	aatggatg	tgatgctgattc...4857...	attcctttactttgcagcaaa	ATGATTGTGTAA	actgtctgcctagcattaaa...55...	ttggttttatag	ctgtaatc
P.Abe	aatggatg	tgatgctgattc...4857...	attcctttactttgcagcaaa	ATGATTGTGTAA	actgtctgcctagcattaaa...55...	ttggttttatag	ctgtaatc
C.Jac	aatggatg	tgatgctgattc...4857...	attcctttactttgcagcaaa	ATGATTGTGTAA	actgtctgcctagcattaaa...55...	ttggttttatag	ctgtaatc
M.Mus	aatggata	tgacactgattc...4857...	actcctttactttgcagcaaa	ATGATTGTGTAA	actgtctgcctagcattaaa...55...	ttggttttatag	ctgtaatc
R.Nor	aatggata	tgacactgattc...4857...	attcctttactttgcagcaaa	ATGATTGTGTAA	actgtctgcctagcattaaa...55...	ttggttttatag	ctgtaatc
C.Por	agtggatg	tgacactgattc...4857...	attcctgtactttgcagcaaa	ATGATTGTGTAA	actgtctgtctagcattaaa...55...	ttggttttatag	ctgtaatc
O.Cun	aaggcctg	tgaggctgattc...4857...	attcctttactttgcagcaaa	ATGATTGTGTAA	actgtctgcctagcattaaa...55...	ttggttttatag	ttgtaatc
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F.Cat	aatggatg	tgacgctgattc...4857...	actcctttactttgcagcaaa	ATGATTGTGTAA	actgtctgcctagcattaaa...55...	ttggttttatag	ccgtaatc
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O.Avi	aatggatg	tgacactgattc...4857...	attcctttgctttgcagcaaa	ATGATTGTGTAA	actgtctgcctagcattaaa...55...	ttggttttatag	ctgtaatc
L.Afr	aacagctg	tgacgccggttc...4857...	attcctttactttgcagcaaa	ATGATTGTGTAA	actgtctgcctagcattaa-...56...	ttggttttatag	ttgtaatc
*	*	*** * * * *		* ** *	*****	*	*****

id=413420 gene=ENSG00000156113 name=KCNMA1 segment=chr10.78823902.78830992.-1 type=IN VIEW

Figure 11:



H. Sap	gagttaag	gtaagctgcct...4893...	aaaattaaatcacgctgaaa	ATAGca	ATTTTCCAGGAAT	cattaatcacctcaaacaataaatacttctttgtaattcaacag	caattctg
R. Mac	gagttaag	gtaagctgcct...4893...	aaaattaaatcacgctgaaa	ATAGca	ATTTTCCAGGAAT	cattaatcacctcaaacaataaatacttctttgtaattcaacag	caattctg
P. Tro	gagttaag	gtaagctgcct...4893...	aaaattaaatcacgctgaaa	ATAGca	ATTTTCCAGGAAT	cattaatcacctcaaacaataaatacttctttgtaattcaacag	caattctg
P. Abe	gagttaag	gtaagctgcct...4893...	aaaattaaatcacgctgaaa	ATAGca	ATTTTCCAGGAAT	cattaatcacctcaaacaataaatacttctttgtaattcaacag	caattctg
C. Jac	gagttaag	gtaagctgcct...4893...	gaaattaaatcatgctgaaa	ATAGca	ATTTTCCAGGAAT	cattaatcacctcatacaataaatacttctttgtaattcaacag	caattctg
C. Por	gagttaag	gtaagctgcct...4893...	gaaattaaatcatgctgaaa	ATAGca	ATTTTCCAGGAAT	cattaatcacctcatacaataaatacttctttgtaattcaacag	caattctg
O. Cun	cagttaag	gtaagctgcct...4893...	gaaattaaatcacgctgaaa	ATAGca	ATTTTCCAGGAAT	cattaatcacctcatacaataaatacttctttgtaattcaacag	caattctg
C. Fam	gagttaag	gtaagctgcct...4900...	-----aatcacgctgaaaatagcaa	TTTTCCAGGAAT	cattaatcacctcatacaataaatacttctttgtaattcaacag	caattctg	
F. Cat	gagttaag	gtaagctgcct...4893...	gaaattaaatcacgctgaaa	ATAGca	ATTTTCCAGGAAT	cattaatcacctcatacaataaatacttctttgtaattcaacag	caattctg
B. Tau	gagttaag	gtaagctcctc...4893...	gaaattaaatcatgctgaaa	ATAGca	ATTTTCCAGGAAT	cattaatcacctcatacaataaatacttctttgtaattcaacag	caattctg
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S. Sus	gagttaag	gtaagctgccc...4900...	-----aatcacgctgaaaatagcaa	TTTTCCAGGAAT	cattaatcacctcatacaataaatacttctttgtaattcaacag	caattctg	
O. Avi	gagttaag	gtaagctcgtc...4893...	gaaattaaatcatgctgaaa	ATAGca	ATTTTCCAGGAAT	cattaatcacctcatacaataaatacttctttgtaattcaacag	caattctg
L. Afr	aagttaag	gtaagctgcct...4893...	gaaattaaatcacgctgaaa	ATAGca	ATTTTCCAGGAAT	cattaatcacctcatacaataaatacttctttgtaattcaacag	caattctg

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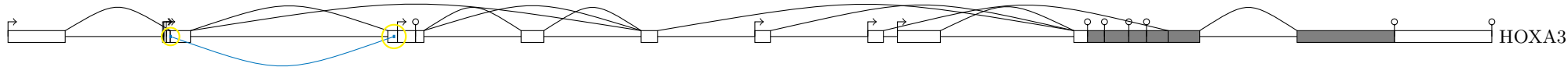
id=99416 gene=ENSG00000105997 name=HOXA3 segment=chr7_27166690_27179701_-1 type=IN

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R. Mac	ttcaacag	caattctgaaaggc	ATTCTCTGGGAA	AAGTCTGT	ggagagagagggatc	ttcttgca
P. Tro	ttcaacag	caattctgaaaggc	ATTCTCTGGGAA	AAGTCTGT	ggaggagagagggatc	ttcttgca
P. Abe	ttcaacag	caattctgaaaggc	ATTCTCTGGGAA	AAGTCTGT	ggagagagagggatc	ttcttgca
C. Jac	ttcaacag	caattctgaaaggc	ATTCTCTGGGAA	AAGTCTGT	ggaggagagagggatc	ttcttgca
C. Por	ttcaacag	caattctgaaaggc	ATTCTCTGGGAA	AAGTCTGT	gaaggagagagggatc	ttcttgca
O. Cun	ttcaacag	caattctgaaaggc	ATTCTCTGGGAA	AAGTCTGT	ggacgagagaggactc	tccttgca
C. Fam	ttcaacag	caattctgaaaggc	ATTCTCTGGGAAA	gtctgt	ggagaagcgagggatc	ttcttgca
F. Cat	ttcaacag	caattctgaaaggc	ATTCTCTGGGAA	AAGTCTGT	ggagaagcgagggatc	ttcttgca
B. Tau	ttcaacag	caattctgaaaggc	ATTCTCTGGGAA	AAGTCTGT	ggagaagcaagggatc	ttcttgca
E. Cab	ttcaacag	caattctgaaaggc	ATTCTCTGGGAA	AAGTCTGT	ggagaagcgagggatc	ttcttgca
S. Sus	ttcaacag	caattctgaaaggc	ATTCTCTGGGAAA	gtctgt	ggagaagcgagggatc	ttcttgca
O. Avi	ttcaacag	caattctgaaaggc	ATTCTCTGGGAA	AAGTCTGT	ggagaagc-agggatc	ttcttgca
L. Afr	ttcaacag	caattctgaaaggc	ATTCTCTGGGAA	AAGTCTGT	ggaggagcgagggatc	ttcttgca

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Figure 12: CS=4.2



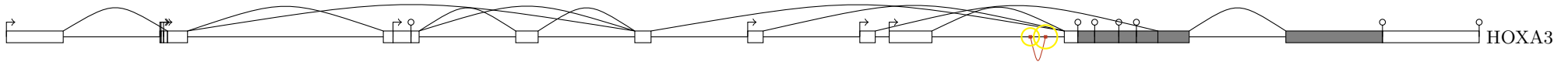
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R. Mac	cgctggac	TCCAT tt GACT c TTTTgCAG	G ctacgtg
P. Tro	cgctgga C	TCCAT tt GACT c TTTTgCAG	G ctacgtg
P. Abe	cgctggac	TCCAT tt GACT c TTTTgCAG	G ctacgtg
C. Jac	cgctgga C	TCCAT tt GACT c TTTTgCAG	G ctacgtg
M. Mus	cgctggac	tccattt GACT c TTTTgCAG	G ctacgtg
R. Nor	cgctggac	tccattt GACT c TTTTgCAG	G ctacgtg
C. Por	cgctggac	tccattt GACT c TTTTgCAG	G ctacgtg
O. Cun	cgctggac	TCCAT tt GACT c TTTTgCAG	G ctacgtg
C. Fam	cgctgga C	TCCAT tt GACT c TTTTgCAG	G ctacgtg
F. Cat	cgctgga C	TCCAT tt GACT c TTTTgCAG	G ctacgtg
B. Tau	cgctgga C	TCCAT tt GACT c TTTTgCAG	G ctacgtg
E. Cab	cgctgga C	TCCAT tt GACT c TTTTgCAG	G ctacgtg
S. Sus	cgctgga C	TCCAT tt GACT c TTTTgCAG	G ctacgtg
O. Avi	cgctgga C	TCCAT tt GACT c TTTTgCAG	G ctacgtg
L. Afr	cgctgga C	TCCAT tt GACT c TTTTgCAG	G ctacgtg
*****	*****	*****	*****

id=99414 gene=ENSG00000105997 name=HOXA3 segment=chr7_27179806_27179825_-1 type=AN

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R. Mac	ttcaacag	caattctgaaaggcattc TCTGgGAAAAGTCtGTGGA aga--gagagggatc	ttcttgca-
P. Tro	ttcaacag	caattctgaaaggcattc TCTGgGAAAAGTCtGTGGAG ga--gagagggatc	ttcttgca-
P. Abe	ttcaacag	caattctgaaaggcattc TCTGgGAAAAGTCtGTGGA aga--gagagggatc	ttcttgca-
C. Jac	ttcaacag	caattctgaaaggcattc TCTGgGAAAAGTCtGTGGAG ga--gagagggatc	ttcttgca-
M. Mus	ttcaacag	caattctgaaaggcattc TCTGgGAAAAGTC tttgaggaggggggggata	a--tgtaa
R. Nor	ttcaacag	caattctgaaaggcattc TCTGgGAAAAGTC tttgagga--gggaggactc	t---tgta
C. Por	ttcaacag	caattctgaaaggcattc TCTGgGAAAAGTC gtgaagga--gagagggatc	ttcttgca-
O. Cun	ttcaacag	caattctgaaaggcattc TCTGgGAAAAGTCtGTGGA cga--gagagggatc	ttcttgca-
C. Fam	ttcaacag	caattctgaaaggcattc TCTGgGAAAAGTCtGTGGAG aa--gcgagggatc	ttcttgca-
F. Cat	ttcaacag	caattctgaaaggcattc TCTGgGAAAAGTCtGTGGAG aa--gcgagggatc	ttcttgca-
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E. Cab	ttcaacag	caattctgaaaggcattc TCTGgGAAAAGTCtGTGGAG aa--gcgagggatc	ttcttgca-
S. Sus	ttcaacag	caattctgaaaggcattc TCTGgGAAAAGTCtGTGGAG aa--gcgagggatc	ttcttgca-
O. Avi	ttcaacag	caattctgaaaggcattc TCTGgGAAAAGTCtGTGGAG aa--gcagggatc	ttcttgca-
L. Afr	ttcaacag	caattctgaaaggcattc TCTGgGAAAAGTCtGTGGAG ga--gcgagggatc	ttcttgca-
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id=99417 gene=ENSG00000105997 name=HOXA3 segment=chr7_27166640_27166689_-1 type=AN VIEW

Figure 13:



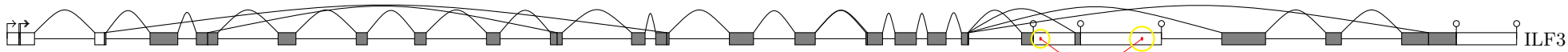
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P. Tro	aagttaag	gtaagcagggcc...2647...tcccccaactccagacgcaa	GTTAaGCAAaTATTTGTAGCAGC	cagtaaattccagcggtttt...	138...tcgccccaccag	gtctgcgc
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C. Jac	aagttaag	gtaagcagggcc...4757...tcccccaactccagacgcaa	GTTAaGCAAaTATTTGTAGC	tgccagtaaattccagcggt---	148...ccccccccag	gtctgcgc
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O. Cun	aagttaag	gtaagcagggcc...2567...tcccccaactccagacacaa	GTTAaGCAAaTATTTGTAGC	tgccagtaaattccagcggc---	145...ccccccccag	gtctgcgc
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L. Afr	aagttaag	gtaagcagggcc...2602...cccccaactccagacgcaa	GTTAaGCAAaTATTTGTAGC	tgccagtaaattccagcggc---	140...ctgccccccag	gtctgcgc
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id=99430 gene=ENSG00000105997 name=HOXA3 segment=chr7_27150380_27153243_-1 type=IN

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R. Mac	aagttaag	gtaagcagggcc...2737...tgccccggggccaagtcgt	GCTGCtAAATATTGCTGAC	cactttttctttatggctt...	63...tcgccccctag	gtctgcgc
P. Tro	aagttaag	gtaagcagggcc...2726...tgccccggggccaagtcgt	GCTGCTAAATATTGCTGAC	cactttttctttatggctt...	63...tcgccccaccag	gtctgcgc
P. Abe	aagttaag	gtaagcagggcc...2728...tgagcccggggccaagtcgt	GCTGCtAAATATTGCTGAC	cactttttctttatggctt...	63...tcgccccaccag	gtctgcgc
C. Jac	aagttaag	gtaagcagggcc...4840...tgcccctggggccaagtcgt	GCTGCtAAATATTGCTGAC	cactttttctttatggctt...	66...ccccccccag	gtctgcgc
M. Mus	aagttaag	gtaagcagggcc...2715...tgccccggggccaagtcgt	GCTGCtAAATATTGCTGAC	cactttttctttatggctt...	66...cccctccctcag	gtttgcgc
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C. Por	aagttaag	gtaagcagggcc...2620...tgccccggggccaagtcgt	GCTGCtAAATATTGCTGAC	cactttttctttatggctt...	66...ccccccccag	gtctgcgc
O. Cun	aagttaag	gtaagcagggcc...2646...tgccccggggccaagtcgt	GCTGCtAAATATTGCTGAC	cactttttctttatggctt...	67...ccccccccag	gtctgcgc
C. Fam	aagttaag	gtaagcagggcc...2708...tgccccggggccaagtcgt	GCTGCtAAATATTGCTGAC	cactttttctttatggctt...	63...tcgccccccag	gtctgcgc
F. Cat	aagttaag	gtaagcagggcc...2707...tgccccggggccaagtcgt	GCTGCtAAATATTGCTGAC	cactttttctttatggctt...	62...ctgccccccag	gtctgcgc
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S. Sus	aagttaag	gtaagcagggcc...2722...tgccccggggccaagtcgt	GCTGCtAAATATTGCTGAC	cactttttctttatggctt...	63...tcgccccccag	gtctgtgc
L. Afr	aagttaag	gtaagcagggcc...2681...tgccccggggccaagtcgt	GCTGCtAAATATTGCTGAC	cactttttctttatggctt...	62...ctgccccccag	gtctgcgc
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Figure 14: CS=9



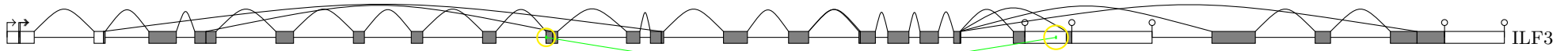
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R. Mac	ccaatttc	ctccaactccaaaacc	caaagtgtccgtgctgtgtccctgtgc	TTCACTGGGTTTC	tCAACC	gtggcttttcaccgcagctt...	252...	cttaatttacag	cagggtttt
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O. Cun	ccaatttc	ctccaactcc-aaaccc	acagtgccgtgctgtgtccctgtgc	TTCACTGGGTTTC	tCAACC	gtggcttttcaccgcagcttg...	251...	cttaatttacag	cagggtttt
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id=811092 gene=ENSG00000129351 name=ILF3 segment=chr19_10795189_10795534.1 type=AN

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C. Jac	caaactctg	gttgatgccttt...	637...	ctacatgattt	gttccaga	GGTTtGAAACat	TCAGTGAA	actttttaaactttcattg---	129...	aaagtaacaagc	cctcggcc
C. Por	caaactctg	gttgatgccttt...	594...	ctgtatgattt	gttcccaa	GGTTtGAAACat	TCAGTGAA	actttttaaactttgattg---	137...	aaagtaacaagc	cctcggcc
O. Cun	caaactctg	gttgatgccttt...	627...	ctacacgatct	gttccaga	GGTTtGAAACat	TCAGTGAA	actttttaaactttgattg---	124...	aaagtaacaagc	cctcggcc
C. Fam	caaactctg	gttgatgccttt...	720...	ctatataattt	gttccaga	GGTTtGAAACat	TCAGTGAA	actttttaaactttgattg---	128...	aaagtaacaagc	cctcggcc
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E. Cab	caaactctg	gttgatgccttt...	704...	ctacataattt	gttccaga	GGTTtGAAACat	TCAGTGAA	actttttaaactttgattg---	127...	aaagtaagaagc	cctcggcc
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id=811094 gene=ENSG00000129351 name=ILF3 segment=chr19_10795581_10796443.1 type=AN VIEW

Figure 15: CS=6.24



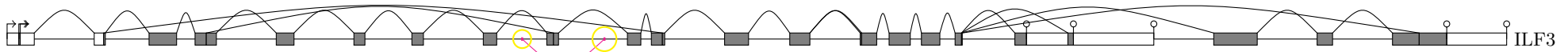
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R. Nor	aatgccag	gttggggccttg...378...atcctctgcataatcttcctt	GTTTccTGCCTT	caG	ATG	gttct
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O. Cun	gatgccag	gttggggccttg...377...atcctctgcataatcttcctt	GTTTccTGCCTT	caG	ATG	gttct
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id=811068 gene=ENSG00000129351 name=ILF3 segment=chr19.10790604.10791021.1 type=IN

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P. Tro	ccaatttc	ctccaactccaa...213...-ctagagacagcgttggttcgg	CATCAAGGCA	AAGC	ccacctttgctttttatgga...54...cttaatttacag	caggtttt
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O. Cun	ccaatttc	ctccaactccaa...211...-ctagagccagcgttggttcag	CATCAAGGCA	AAGC	ccacctttgctttttatgga...54...cttaatttacag	caggtttt
C. Fam	ccaatttt	ctcgaactccaa...211...-ctagagccagcgttggttcag	CATCAAGGCA	AAGC	ccacctttgctttttatgga...53...cttaatttacag	caggtttt
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id=811092 gene=ENSG00000129351 name=ILF3 segment=chr19.10795189.10795534.1 type=AN VIEW

Figure 16:



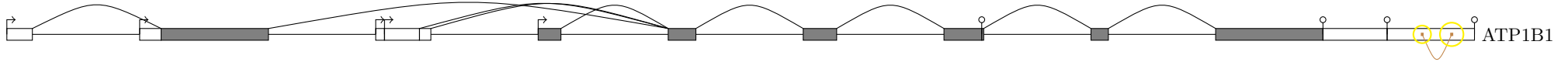
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R. Nor	aatgccag	gttggggccttg...170...--ataaatcagagggcggacc	GGGGCCGGTgGTGA	CCACTCCC	acatgactttcttgctctga...	168...tcctgccttcag	atggttct
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C. Por	gtgcgca-g	gtatagtcgctc-...318...-tctcctgtactcctcttgag-	GGGGGTGGTCACag	GCTGgcCTCC	ccccacagcaaggctgggct	-----...149...ccccttctccag	catgctct
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C. Fam	gtgcgca-g	gtatagtcacg-...327...-tctcctgtattcctctcgag-	GGGGGTGGTCACag	GCTGgcCTTC	ccccacagcaggttgggct	-----...153...ccccttctccag	catgctct
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Figure 18: CS=3.9



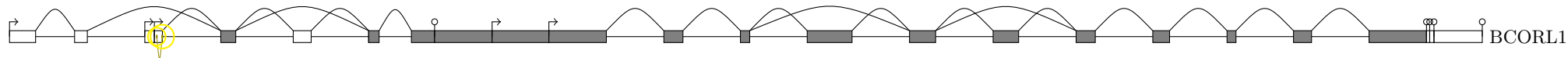
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L. Afr	-tggcccgg	ccgtcacttggg...251...atggtgtcgaagtgc	TCCATG	-----	TTcTAAC	at	atgtaaatattgccaagga--...58...atgaacacattt	ctcgtgtg--
		** *	** ** *	*** **	* ***	*	* ** ** *	***** *

id=471750 gene=ENSG00000143153 name=ATP1B1 segment=chr1_169101554_169101960.1 type=E3

H. Sap	-tggatctg	cccatcactttg...249...agtaccatagactggtgt	TAAAt	GTTGT	ctACAGTGCAAAAT	ccatgttcta	atcatatgtaataattgccaggagtacagt	gctctgtt	gatctt	gtattc	agtcaggttaaaacaacggacaataaaagaatgaacacattc	ctcgt
R. Mac	-tggatctg	cccatcactttg...249...agtaccatagactggtgt	TAAAt	GTTGT	ctACAGTGCAAAAT	ccatgttcta	atcatatgtaataattgccaggagtacagt	gctctgtt	gatctt	gtattc	agtcaggttaaaacaatggacaataaaagaatgaacacattc	ctcat
P. Tro	-tggatctg	cccatcactttg...249...agtaccatagactggtgt	TAAAt	GTTGT	ctACAGTGCAAAAT	ccatgttcta	atcatatgtaataattgccaggagtacagt	gctctgtt	gatctt	gtattc	agtcaggttaaaacaatggacaataaaagaatgaacacattc	ctcgt
P. Abe	-tggatctg	cccatcactttg...249...agtaccatagactggtgt	TAAAt	GTTGT	ctACAGTGCAAAAT	ccatgttcta	atcatatgtaataattgccaggagtacagt	gctctgtt	gatctt	gtattc	agtcaggttaaaacaatggacaataaaagaatgaacacattc	ctcat
C. Jac	-tggatctg	cccatcactttg...249...agtaccatagactggtgt	TAAAt	GTTGT	ctACAGTGCAAAAT	ccatgttcta	atcatatgtaataattgccaggagtacagt	gctctgtt	gatctt	gtattc	agtcaggttaaaacaatggacaataaaagaatgaacacattc	ctcat
M. Mus	-gggatctg	cctgtcactgtg...250...agtaccatagactggtgt	TAAAt	GTTGT	ctACAGTGCA	aatccatgtt	ctagcatatgtaataattgccaggagtacagt	gctctgtt	gatctt	gttgc-tcagtcaggttaacacaacggacaataaaagaatgaacacattc	ctcac	
R. Nor	-tggatctg	ccgtcactttg...247...agtaccatagactggtgt	TAAAt	GTTGT	ctACAGTGCA	aatccatgtt	ctagcatatgtaataattgccaggagtacagt	gctctgtt	gatctt	gttgc-tcagtcaggttaacacaatggacaataaaagaatgaacacattc	ttcac	
C. Por	-tggctcca	cctgtcacttag...244...agtaccatagactggtgt	TAAAt	GTTGT	ctACAGTGCA	aatccatgtt	ctagcatatgtaataattgccaggagtacagt	gctctgtt	gatctt	gttgc-tcagtcaggttaaaacaatggacaataaaagaatgaacacattc	ctcat	
O. Cun	-tggagctg	cccatcaccgcg...253...-----ccatagactggtgt	GTTGT	ctACAGTGCAAAAT	ccatgttcta	atcatatgtaataattgccaggagtacagt	gctctgtt	gatctt	gtattc	agtcaggttaaaacaatggacaataaaagaatgaacacattc	cttat	
C. Fam	ctggatc-g	cctgtcacttgg...251...agtaccatagactggtgt	TAAAt	GTTGT	ctACAGTGCAAAAT	ccatgttcta	atcatatgtaataattgccaggagtacagt	gctctgtt	gatctt	gttgc-tcagtcaggttaaaacaatggacaataaaagaatgaacacattc	ctcat	
F. Cat	ctggatc-g	cctgtcacttgg...252...agtaccatagactggtgt	TAAAt	GTTGT	ctACAGTGCAAAAT	ccatgttcta	atcatatgtaataattgccaggagtacagt	gctctgtt	gatctt	gttgc-tcagtcaggttaaaacaatggacaataaaagaatgaacacattc	ctcat	
B. Tau	ctggagc-g	cccatcactttg...256...-----ccatagactggtgt	GTTGT	ctACAGTGCAAAAT	ccatgttcta	atcatatgtaataattgccaggagtacagt	gctctgtt	gatctt	gttgc-tcagtcaggttaaaacaatggacaataaaagaatgaacacattc	ctcat		
E. Cab	ctggatc-g	ccgtcactttg...338...ttgatctgtattgagtcag	GTTAaA	-----	ACAaTGGA	-----	-----	-----	-----	-----	caataaaagaatgaacacattc	ctcat
S. Sus	ctggagc-a	ccgtcactttg...256...agtaccatagactggtgt	TAAAt	GTTGT	ctACAGTGCAAAAT	ccatgttcta	atcatatgtaataattgccaggagtacagt	gctctgtt	gatctt	gttgc-tcagtcaggttaaaacaatggacaataaaagaatgaacacattc	ctcat	
O. Avi	ctggagc-g	cccatcactttg...251...agtaccatagactggtgt	TAAAt	GTTGT	ctACAGTGCAAAAT	ccatgttcta	atcatatgtaataattgccaggagtacagt	gctctgtt	gatctt	gttgc-tcagtcaggttaaaacaatggacaataaaagaatgaacacattc	ctcat	
L. Afr	-tggcccgg	ccgtcacttggg...318...ttgatctgtattgagtcag	GTTAaA	-----	ACAaTGGA	-----	-----	-----	-----	-----	caataaaagaatgaacacattt	ctcgt
		** *	** ** *	*	**	*	*** ** *				*****	

id=471750 gene=ENSG00000143153 name=ATP1B1 segment=chr1_169101554_169101960.1 type=E3 VIEW

Figure 19:



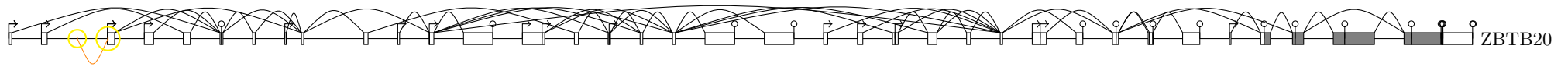
H. Sap	cgctTTGC	TGA	gcCCTCCCTTCTTCCTCTC	agttccttagagtccga---ccgccgccgcccgagagagaggagaaggag	gtcgggtgg
R. Mac	cgctTTGT	TGA	gcCCTCCCTTCTTCCTCTC	agttccttagagtccga---ccgccgccgctgcccagagagaggagaaggag	gtcgggtgg
C. Jac	cgctTTGC	TGA	gcCCTCCCTTCTTCCTCTC	agTTCCtagagtccga---ccgctgcccgccggagagagaggagaaggag	gtcgggtgg
M. Mus	cgctttGC	TGA	gcCCTCCTTCTTCCTCTC	agttccttagagtccga---ccgccgccgcccgt----gagagagaggagaaggag	gtcggtag
C. Por	cgcttTGC	TGA	gcCCTCCTTCTTCCTCTC	agttccttagagtccga---ccgccgccgcccagagagaggagaaggag	gtcgggtgg
O. Cun	cgctTTGC	TGA	gcCCTCCCTTCTTCCTCTC	agttccttagagtccga---ccgccgctgcccagagagaggagaaggag	gtcgggtgg
C. Fam	cgctTTGC	CGA	gcCCTCCCTTCTTCCTCTC	agttccttagagtccga---ccgccgccgcccagagagaggagaaggag	gtcgggtgg
F. Cat	cgctTTGC	CGA	gcCCTCCCTTCTTCCTCTC	agTTCCtagagtccga---ccgccgccgcccggagagagaggagaaggag	gtcgggtgg
B. Tau	cgctTTGC	TGA	gcCCTCCCTTCTTCCTCTC	agttccttagagtccgaccgccgcccagagagaggagaaggag	gtcgggtgg
E. Cab	cgctTTGC	TGA	gcCCTCCCTTCTTCCTCTC	agttccttagagtccga---ccgccgccgcccagagagaggagaaggag	gtcgggtgg
O. Avi	cgctTTGC	TGA	gcCCTCCCTTCTTCCTCTC	agttccttagagtccgaccgccgcccagagagaggagaaggag	gtcgggtgg
L. Afr	cgctTTGC	TGA	gcCCTCCCTTCTTCCTCTC	agttccttagagtccga-----ccgccgccgcccagagagaggagaaggag	gtcgggtgg
*****	*****	*****	*****	* * * * *	*****

id=271709 gene=ENSG00000085185 name=BCORL1 segment=chrX_129116669_129116738.1 type=AN

H. Sap	cgctttgc	tgagccctcccttcttctctcagttccttagagtccgaccgccgcccgc---	GAGAGAGAGGAGAAGGAG	GTCGGTGg
R. Mac	cgctttgt	tgagccctcccttcttctctcagttccttagagtccgaccgccgctgccc---	GAGAGAGAGGAGAAGGAG	GTCGGTGg
C. Jac	cgctttgc	tgagccctcccttcttctctcagttccttagagtccgaccgctgcccgc---	GGAGAGAGAGGAGAAGGAG	GTCGGTGg
M. Mus	cgctttgc	tgagccctcccttcttctctcagttccttagagtccgaccgccgcccgc---	TGAGAGGAGAAGGAG	GTCGGTg
C. Por	cgctttgc	tgagccctcccttcttctctcagttccttagagtccgaccgccgcccgc---	GAGAGAGGAGAAGGAG	GTCGGTGg
O. Cun	cgctttgc	tgagccctcccttcttctctcagttccttagagtccgaccgctgcccgc---	GAGAGAGAGGAGAAGGAG	GTCGGTGg
C. Fam	cgctttgc	cgagccctcccttcttctctcagttccttagagtccgaccgccgcccgc---	GAGAGAGAGGAGAAGGAG	GTCGGTGg
F. Cat	cgctttgc	cgagccctcccttcttctctcagttccttagagtccgaccgccgcccgc---	GGAGAGAGAGGAGAAGGAG	GTCGGTGg
B. Tau	cgctttgc	tgagccctcccttcttctctcagttccttagagtccgaccgccgcccgc---	GAGAGAGAGGAGAAGGAG	GTCGGTGg
E. Cab	cgctttgc	tgagccctcccttcttctctcagttccttagagtccgaccgccgcccgc---	GAGAGAGAGGAGAAGGAG	GTCGGTGg
O. Avi	cgctttgc	tgagccctcccttcttctctcagttccttagagtccgaccgccgcccgc---	GAGAGAGAGGAGAAGGAG	GTCGGTGg
L. Afr	cgctttgc	tgagccctcccttcttctctcagttccttagagtccgaccgccgcccgc---	GAGAGAGAGGAGAAGGAG	GTCGGTGg
*****	*****	*****	* * * * *	*****

id=271709 gene=ENSG00000085185 name=BCORL1 segment=chrX_129116669_129116738.1 type=AN VIEW

Figure 20:



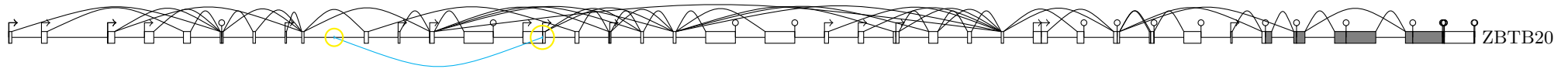
H. Sap	ctttcacg	gtgaggtcctaa...4947...ggtttgtaaggtaggttgca	GTGTGTGTAT	ATACACA	a
R. Mac	ctgtcatg	gtgaggtcctaa...4947...ggtttgtaaggtaggttgca	GTGTGTGTAT	ATACACA	a
P. Tro	ctttcacg	gtgaggtcctaa...4947...ggtttgtaaggtaggttgca	GTGTGTGTAT	ATACACA	a
P. Abe	ctttcacg	gtgaggtcctaa...4947...ggtttgtaaggtaggttgca	GTGTGTGTAT	ATACACA	a
M. Mus	ttttcctg	atgaccttctag...4947...ggtttgtaaggtaggttgca	GTGTGTGTAT	ATACACA	a
R. Nor	ctctcctg	tcgaccttctaa...4947...ggtttgtaaggtaggttgca	GTGTGTGTAT	ATACACA	a
C. Por	tttacatt	ctggaattttaa...4947...ggtttgtaaggtaggttgca	GTGTGTGTAT	ATACACA	a
O. Cun	cttttgtg	acaaggttctga...4947...ggtttgtaaggtaggttgca	GTGTGTGTAT	ATACACA	a
C. Fam	ctttcatg	gtgaggtcccaa...4947...ggtttgtaaggtaggttgca	GTGTGTGTAT	ATACACA	a
B. Tau	ctttcatg	gtgagatcccag...4947...ggtttgtaaggtaggttgca	GTGTGTGTAT	ATACACA	a
E. Cab	ctttcatg	gtaaggtcctga...4947...ggtttgtaaggtaggttgca	GTGTGTGTAT	ATACACA	a
O. Avi	ctttcatg	gtgagatcccag...4947...ggtttgtaaggtaggttgca	GTGTGTGTAT	ATACACA	a
L. Afr	ctgtggtg	gtcaggtcctga...4947...ggtttgtaaggtaggttgca	GTGTGTGTAT	ATACACA	a
	*	*	* *****	*****	

id=612805 gene=ENSG00000181722 name=ZBTB20 segment=chr3_114819143.114863659_-1 type=IN

H. Sap	gTGTGTAT	ATACACaACAt
R. Mac	gTGTGTAT	ATACACaACAt
P. Tro	gTGTGTAT	ATACACaACAt
P. Abe	gTGTGTAT	ATACACaACAt
M. Mus	gTGTGTAT	ATACACaACAt
R. Nor	gTGTGTAT	ATACACaACAt
C. Por	gTGTGTAT	ATACACaACAt
O. Cun	gTGTGTAT	ATACACaACAt
C. Fam	gTGTGTAT	ATACACaACAt
B. Tau	gTGTGTAT	ATACACaACAt
E. Cab	gTGTGTAT	ATACACaACAt
O. Avi	gTGTGTAT	ATACACaACAt
L. Afr	gTGTGTAT	ATACACaACAt
	*****	*****

id=612806 gene=ENSG00000181722 name=ZBTB20 segment=chr3_114819140.114819142_-1 type=AN VIEW

Figure 21:



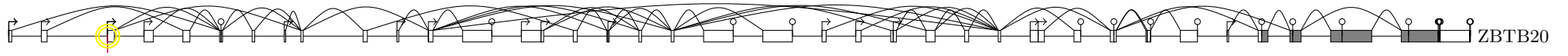
H. Sap	ctgcacag	gtatgtatatga...4604...	-aggtctgtgcttattaagct	GTGTgACTTcc	TGTGaaGATGaGTTT	atagcaaatatgttcatatgt...	295...	tttctttttaag	cctatgtc
P. Tro	ctgcacag	gtatgtatatca...4604...	-aggtctgtgcttattaagct	GTGTgACTTcc	TGTGaaGATGaGTTT	atagcaaatatgttcatatgt...	295...	tttctttttaag	cctatgtc
P. Abe	ctgcacag	gtatgtatatga...4604...	-aggtctgtgcttattaagct	GTGTgACTCcc	TGTGaaGATGaGTTT	atagcaaatatgttcatatgt...	295...	tttctttttaag	cctatgtc
C. Jac	ctgcacag	gtatgtatatga...4605...	-aggtctatgcttattaagct	GGGTGACTTcc	TGTGaaGATGaGTTT	atagcaaatatgttcatatgt...	294...	tttctttttaag	cctatgtc
M. Mus	ctgcacag	gtatgtatgtga...4628...	-gggtctgtgcttattaagct	GGGTAActc	CTGTGaaGATGaGTTT	ataaaaaatagctcatatgc...	271...	ttcctttcctaaa	cacatgtc
R. Nor	ccgcacag	gtatgtatgtga...4635...	-aggtctgtgcttattaagct	GGGTAActc	CTGTGaaGATGaGTTT	at-aaaatagctcatatgct...	264...	ttcctttctaaa	cacatgtg
C. Por	ccgaacag	gtatgtacacga...4617...	-aggtctgtgcttattaagct	GGGTGACTTcc	TGTGaaGATGaGTTT	atagcaaatatgttcatacat...	282...	ttcctttttatg	atcatctc
O. Cun	ttgcacag	gtatgtatatga...4606...	-aggactgtgcttattaagct	GGGTGACTTcc	TGTGaaGATGaGTTT	atagcaaatatgttcatatgt...	293...	ctttttataag	cctatatt
C. Fam	ctgcacag	gtatgtatatga...4605...	-caggctctgtgcttatt-agct	GGGTGACTTcc	TGTGaaGATGaGTTT	atagcaaatatgttcatatgt...	294...	ttccttttcagg	cttctgcc
F. Cat	ctgcacag	gtatgtatatga...4599...	-----tgtgcttattaagctgggtg	ACTTcc	TGTGaaGATGaGTTT	atagcaaatatgttcatatgt...	305...	ttccttttcagg	cctctgcc
B. Tau	ctgcacag	gtatgtatgtga...4601...	-aggtctgtgcttattaagct	GGGTGACTTcc	TGTGaaGATGaGTTT	atagcaaatatgttcatatgt...	298...	tccttttttagg	cctctgtc
E. Cab	ctgcacag	gtatgtatatga...4602...	-aggtctgtgcttattaagct	GGGTGACTTcc	TGTGaaGATGaGTTT	atagcaaatatgttcatatgt...	297...	ttccttttttagg	cttatgtt
S. Sus	agctgcag	ctgtgtatatga...4601...	-aggtctgtgcttattaagct	GGGTGACTTcc	TGTGaaGATGaGTTT	atagcaaatatgttcatatgt...	298...	ttcctttttaag	cctatgac
O. Avi	ctgcacag	gtatgtatatga...4600...	-aggtctgtgcttattaagct	GGGTGACTTcc	TGTGaaGATGaGTTT	atagcaaatatgttcatatgt...	299...	ccttttcttagg	cctctgtc
		***	* **** *	*	***** ** ** ** **	***** *****		** *	*

id=612821 gene=ENSG00000181722 name=ZBTB20 segment=chr3.114592956.114619150.-1 type=IN

H. Sap	tcatagca	atctagcctccc...280...	ggttagaagaacacagaaa	---AAATgCATCggTACAGAGT	ACATttca----
P. Tro	tcatagca	atctagcctccc...280...	ggttagaagaacacagaaa	---AAATgCATCggTACAGAGT	ACATttca----
P. Abe	tcatagca	atctagtgtccc...280...	ggttagaagaacacagaaa	---AAATgCATCggTACAGAGT	ACATttca----
C. Jac	tcatagcg	atctagtgtccc...280...	ggttagaagaacacagaaa	---AAATgCATCggTACAGAGT	aCATTca----
M. Mus	gtacagcc	atcctgcgtcgc...279...	ggttagaagaacacagaaa	---AAATgCATCggTACAGAGT	TcATTca----
R. Nor	ttacagcc	atcctgcctcgt...283...	---tagaaagaacacagaaaa	AAATgCATCggTACAGAGT	TcATTca----
C. Por	tcacagcc	gtcccagcgtccc...281...	ggttagaagaacacagaaa	---AAATgCATCgaTACAGAGT	aCATTca----
O. Cun	tcatagct	atctagcgtccc...280...	ggttagaagaacacagaaa	---AAATgCATCggTACAGAGT	aCATTca----
C. Fam	tcatagcc	atccagcgtccc...280...	ggttagaagaacacagaaa	---AAATgCATCggTACAGAGT	aCATTca----
F. Cat	tcatagcc	atctagcgtccc...280...	ggttagaagaacacagaaa	---AAATgCATCggTACAGAGT	-----acagtttc
B. Tau	tcatagcc	atctagcgtccc...280...	ggttagaagaacacagaaa	---AAATgCATCggTACAGAGT	aCATTca----
E. Cab	tcacagcc	atctagcgtcct...280...	ggttagaagaacacagaaa	---AAATgCATCggTACAGAGT	aCATTca----
S. Sus	tcatagcc	atctagagtc...280...	ggttagaagaacacagaaa	---AAATgCATCggTACAGAGT	aCATTca----
O. Avi	tcatagcc	atctagcgtccc...280...	ggttagaagaacacagaaa	---AAATgCATCggTACAGAGT	aCATTca----
		***	** * **	***** *****	***** *****

id=612831 gene=ENSG00000181722 name=ZBTB20 segment=chr3.114477788.114478118.-1 type=AN VIEW

Figure 22: CS=4.2



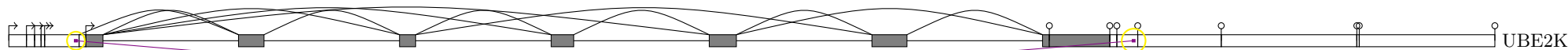
H.Sap	gTGTGTAT	ATACAcaacat
R.Mac	gTGTGTAT	ATACAcaacat
P.Tro	gTGTGTAT	ATACAcaacat
P.Abe	gTGTGTAT	ATACAcaacat
M.Mus	gTGTGTAT	ATACAcaacat
R.Nor	gTGTGTAT	ATACAcaacat
C.Por	gTGTGTAT	ATACAcaacat
O.Cun	gTGTGTAT	ATACAcaacat
C.Fam	gTGTGTAT	ATACAcaacat
F.Cat	gTGTGTAT	ATACAcaacat
B.Tau	gTGTGTAT	ATACAcaacat
E.Cab	gTGTGTAT	ATACAcaacat
L.Afr	gTGTGTAT	ATACAcaacat
	*****	*****

id=612806 gene=ENSG00000181722 name=ZBTB20 segment=chr3.114819140.114819142.-1 type=AN

H.Sap	tGTAT	ATA	CACA	acatcaagagcaggaaaatg...82...ctggggaagaag	gtagggca
R.Mac	tGTAT	ATA	CACA	acatcaagagcaggaaaatg...82...ctggggaagaag	gtagggca
P.Tro	tGTAT	ATA	CACA	acatcaagagcaggaaaatg...82...ctggggaagaag	gtagggca
P.Abe	tGTAT	ATA	CACA	acatcaagagcaggaaaatg...82...ctggggaagaag	gtagggca
M.Mus	tGTAT	ATA	CACA	acatcaagagcaggaaaatg...82...ctggggaagaag	gtaggggc
R.Nor	tGTAT	ATA	CACA	acatcaagagcaggaaaatg...82...ctggggaagaag	gtagggca
C.Por	tGTAT	ATA	CACA	acatcaagagcaggaaaatg...82...ctggggaagaag	gtagggca
O.Cun	tGTAT	ATA	CACA	acatcaagagcaggaaaatg...82...ctggggaagaag	gtagggca
C.Fam	tGTAT	ATA	CACA	acatcaagagcaggaaaatg...82...ctggggaagaag	gtagggca
F.Cat	tGTAT	ATA	CACA	acatcaagagcaggaaaatg...82...ctggggaagaag	gtagggca
B.Tau	tGTAT	ATA	CACA	acatcaagagcaggaaaatg...82...ctggggaagaag	gtagggca
E.Cab	tGTAT	ATA	CACA	acatcaagagcaggaaaatg...82...ctggggaagaag	gtagggca
L.Afr	tGTAT	ATA	CACA	acatcaagagcaggaaaatg...82...ctggggaagaag	gtagagca
	*****	***	*****	*****	**** ***** **** *

id=612807 gene=ENSG00000181722 name=ZBTB20 segment=chr3.114819022.114819139.-1 type=AN VIEW

Figure 23:



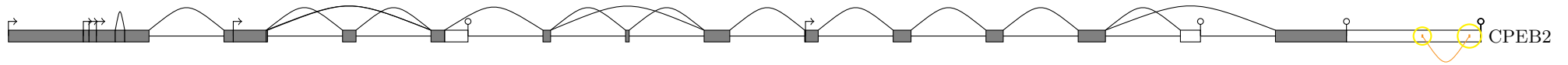
H. Sap	cacactga-	ggcgagcgcggc---.67...	aagaggtggcggcggtggcg	GTGGTcgTAGCggTGGC	ggaggaggcgg	gtacgaat
R. Mac	cacactga-	ggcgagcgcggc---.67...	aagaggtggcggcggtggcg	GTGGTcgTAGCggTGGC	GAGGAGg	gtacgaat
P. Tro	cacactga-	agggagcgcggc---.67...	aagaggtggcggcggtggcg	GTGGTcgTAGCggTGGC	GAGGAGg	gtacgaat
P. Abe	cacactga-	ggcgagcgcgac---.67...	aagaggtggcggcggtggcg	GTGGTcgTAGCggTGGC	GAGGAGg	gtacgaat
C. Jac	cacactga-	ggagagcgcggc---.67...	aagaggtggcggcggtggcg	GTGGTcgTAGCggTGGC	GAGGAGg	gtacgaat
M. Mus	tacagtgag	gaggaaacgcga---.71...	aagaggtggcagcggcggcg	GTGGTcgTAGCggTGGC	GAGGAGg	gtacgaat
R. Nor	tacactgag	ggggaacgcga---.68...	aagaggtggcagcggcggcg	GTGGTcgTAGCggTGGC	GAGGAGg	gtacgaat
C. Por	tatac---	gggagcgcgcggc...70...	aagaggtggcagcggcggcg	GTGGTcgTAGCggTGGC	GAGGAGg	gtacgaat
O. Cun	tccacaga-	gcagagcccggc---.67...	aagaggtggcggcggtggcg	GTGGTcgTAGCggTGGC	GAGGAGg	gtacgaat
C. Fam	cacactga-	ggagagcgcggc---.66...	aagaggtggcggcggtggcg	GTGGTcgTAGCggTGGC	GAGGAGg	gtacgaat
B. Tau	cacattga-	agatagtgcggc---.67...	aagaggtggcggcggtggcg	GTGGTcgTAGCggTGGC	GAGGAGg	gtacgaat
E. Cab	cacactga-	gggagcgcgcggc---.67...	aagaggtggcagcggcggcg	GTGGTcgTAGCggTGGC	GAGGAGg	gtacgaat
S. Sus	cacactga-	ggagagcgcggc---.67...	aagaggtggcggcggtggcg	GTGGTcgTAGCggTGGC	ggaggaggcgg	gtacgaat
L. Afr	cacactga-	ggagagcgcggc---.68...	-aagaggtggcggcggtggcgt	TGGTcgTAGCggTGGC	GAGGAGg	gtacgaat
	*	* * *	*****	** * *	*****	*****

id=269415 gene=ENSG0000078140 name=UBE2K segment=chr4.39699796.39699922.1 type=EN

H. Sap	tttaaaaa	ggggaataacttta--ttttttt	-cttaatagtgtataaaattccctga-	GCTAaGCTAaaACCAT	ggaagaaacatgct	actttagt
R. Mac	tttaaaaa	ggggaataactttaattttttt	-cttaatagtgtataaaa-	TTCTTTgaGCTAaGCTAaaACCAT	ggaagaaacatgct	actttagt
P. Tro	tttaaaaa	ggggaataacttta--ttttttt	-cttaatagtgtataaaa-	TTCTTTgaGCTAaGCTAaaACCAT	ggaagaaacatgct	actttagt
P. Abe	tttaaaaa	ggggaataacttta--ttttttt	-cttaatagtgtataaaa-	TTCTTTgaGCTAaGCTAaaACCAT	ggaagaaacatgct	actttagt
C. Jac	tttaaaaa	ggggaataacttta--ttttttt	-cttaatagtgtataaaa-	TTCTTTgaGCTAaGCTAaaACCAT	ggaagaaacatgct	actttagt
M. Mus	tttaaaaa	ggggaataactttaattttttt	-cttaatagtgtataaaa-	TTCTTTgaGCTAaGCTAaaACCAT	-gggaaacatgct	actttagt
R. Nor	tttaaaaa	ggggaataactttaattttttt	-cttggtagtgtataaaa-	TCCTTTgaGCTAaGCTAaaACCAT	-gggaaacatgct	actttagt
C. Por	tttaaaaa	ggggaataactttaattttttt	-cttaatagtgtataaaa-	TTCTTTgaGCTAaGCTAaaACCAT	-gaaaaacatgct	actttagt
O. Cun	tttaaaaa	ggggaataacttta--ttttttt	ccttaatagtgtataaaa-	TTCTTTgaGCTAaGCTAaaACCAT	-gaaaaacttgc	actttagt
C. Fam	tttaaaaa	ggggaataactttaattttttt	-cttaatagtgtataaaa-	TTCTTTgaGCTAaGCTAaaACCAT	ggaaaaaacatgct	actttagt
B. Tau	tttaaaaa	ggggaataactttaattttttt	ccttaatagtgtataaaa-	TTCTTTgaGCTAaGCTAaaACCAT	ggaaaaaacatgct	actttagt
E. Cab	tttaaaaa	ggggaataactttaattttttt	ccttaatagtgtataaaa-	TTCTTTgaGCTAaGCTAaaACCAT	ggaaaaaacatgct	actttagt
S. Sus	tttaaaaa	ggggaataactt----ttttt	ccttaatagtgtataaaa-	GCTAaGCTAaaACCAT	ggaaaaaacatgct	actttagt
L. Afr	tttaaaaa	ggggaataactttaattttttt	ccttaatagtgtataaaa-	TTCTTTgaGCTAaGCTAaaACCAT	ggaaaaaacatgct	actttact
	** *****	*****	** *****	* * *****	*****	***** *

id=269432 gene=ENSG0000078140 name=UBE2K segment=chr4.39780254.39780330.1 type=EN VIEW

Figure 24:



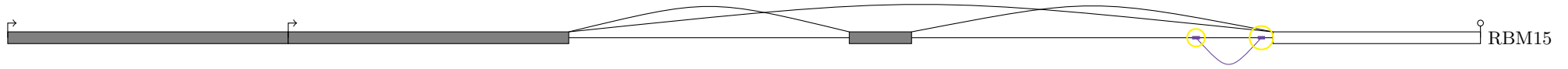
H. Sap	gtattttc	tccaagttattt...3089...tgaaatctttgtaatatttaaAGCAACTAgTTTCtaattcccagtttctgtata...357...ttaagttattgg	catagttg
R. Mac	gtattttc	tccaagttattt...3094...tgaaatctttgtaatatttaaAGCAACTAgTTTCtaattcccagtttctgtata...357...ttaagttattgg	catagttg
P. Tro	gtattttc	tccaagttattt...3086...tgaaatctttgtaatatttaaAGCAACTAgTTTCtaattcccagtttctgtata...357...ttaagttattgg	catagttg
P. Abe	gtattttc	tccaagttattt...3086...tgaaatctttgtaatatttaaAGCAACTAgTTTCtaattcccagtttctgtata...357...ttaagttattgg	catagttg
C. Jac	gtattttc	tccaagttattt...3098...tgaaatctttgtaatatttaaAGCAACTAgTTTCtaattcccagtttctgtata...357...ttaagttattgg	catagttg
M. Mus	gtattttc	tccaagttattt...3097...tgaaatctttgtaatatttaaAGCAACTAgTTTCtaattcccagtttctgtata...358...ttaagttattgg	cagagctg
R. Nor	gtattttc	tccaagttattt...3097...tgaaatctttgtaatatttaaAGCAACTAgTTTCtaattcccagtttctgtata...358...ttaagttattgg	catagctg
C. Por	gtattttc	tccaagttattt...3112...tgaaatctttgtaatatttaaAGCAACTAgTTTCtaattcccagtttctgtata...358...ttaagttattgg	catagttg
O. Cun	gtattttc	tccaagttattt...3110...tgaaatctttgtaatatttaaAGCAACTAgTTTCtaattcccagtttctgtata...358...ttaagttattgg	catagttg
C. Fam	gtattttc	tccaagttattt...3104...tgaaatctttgtaatatttaaAGCAACTAgTTTCtaattcccagtttctgtata...359...ttaagttattgg	catagttg
B. Tau	gtattttc	tccaagttattt...3081...tgaaatctttgtaatatttaaAGCAACTAgTTTCtaattcccagtttctgtata...359...ttaagttattgg	catagttg
E. Cab	gtattttc	tccaagttattt...3082...tgaaatctttgtaatatttaaAGCAACTAgTTTCtaattcccagtttctgtata...359...ttaagttattgg	catagttg
L. Afr	gtattttc	tccaagttattt...3081...tgaaatctttgtaatatttaaAGCAACTAgTTTCtaattcccagtttctgtata...358...ttaagttattgg	catagttg
*****	*****	***** * ***** *	** ** **

id=207354 gene=ENSG00000137449 name=CPEB2 segment=chr4_15068251_15071773.1 type=E3

H. Sap	gtattttc	tccaagttattt...3403...tggaatttaactctgtaatGGAATAGTtTGCTgccaactatttatattaagt...43...ttaagttattgg	catagttg
R. Mac	gtattttc	tccaagttattt...3408...tggaatttaactctgtaatGGAATAGTtTGCTgccaactatttatattaagt...43...ttaagttattgg	catagttg
P. Tro	gtattttc	tccaagttattt...3400...tggaatttaactctgtaatGGAATAGTtTGCTgccaactatttatattaagt...43...ttaagttattgg	catagttg
P. Abe	gtattttc	tccaagttattt...3400...tggaatttaactctgtaatGGAATAGTtTGCTgccaactatttatattaagt...43...ttaagttattgg	catagttg
C. Jac	gtattttc	tccaagttattt...3412...tggaatttaactctgtaatGGAATAGTtTGCTgccaactatttatattaagt...43...ttaagttattgg	catagttg
M. Mus	gtattttc	tccaagttattt...3412...tggaatttaactctgtaatGGAATAGTtTGCTgccaactatttatattaagt...43...ttaagttattgg	cagagctg
R. Nor	gtattttc	tccaagttattt...3412...tggaatttaactctgtaatGGAATAGTtTGCTgccaactatttatattaagt...43...ttaagttattgg	catagctg
C. Por	gtattttc	tccaagttattt...3427...tggaatttaactctgtaatGGAATAGTtTGCTgccaactatttatattaagt...43...ttaagttattgg	catagttg
O. Cun	gtattttc	tccaagttattt...3425...tggaatttaactctgtaatGGAATAGTtTGCTgccaactatttatattaagt...43...ttaagttattgg	catagttg
C. Fam	gtattttc	tccaagttattt...3420...tggaatttaactctgtaatGGAATAGTtTGCTgccaactatttatattaagt...43...ttaagttattgg	catagttg
B. Tau	gtattttc	tccaagttattt...3397...tggaatttaactctgtaatGGAATAGTtTGCTgccaactatttatattaagt...43...ttaagttattgg	catagttg
E. Cab	gtattttc	tccaagttattt...3398...tggaatttaactctgtaatGGAATAGTtTGCTgccaactatttatattaagt...43...ttaagttattgg	catagttg
L. Afr	gtattttc	tccaagttattt...3396...tggaatttaactctgtaatGGAATAGTtTGCTgccaactatttatattaagt...43...ttaagttattgg	catagttg
*****	*****	***** * ***** *	** ** **

id=207354 gene=ENSG00000137449 name=CPEB2 segment=chr4_15068251_15071773.1 type=E3 VIEW

Figure 25:



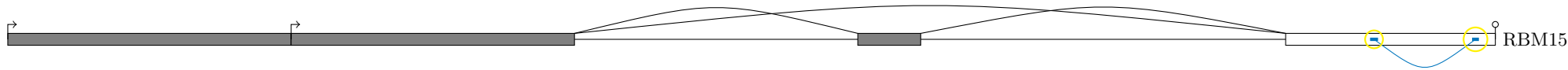
H. Sap	gatttcag	gtaaccacagtg...474...	atttcaaggtttatgccagt	GGGTat	TATTGGTGC	-ttttgaagttgaggtgaac...	105...	ccctccgcaag	caaaactg
R. Mac	gatttcag	gtaaccacagtg...476...	atttcaaggtttatgccagt	GGGTat	TATTGGTGC	-ttttgaagttgaggtgaac...	105...	ccctccgcaag	caaaactg
P. Tro	gatttcag	gtaaccacagtg...477...	atttcaaggtttatgccagt	GGGTat	TATTGGTGC	-ttttgaagttgaggtgaac...	106...	ccctccgcaag	caaaactg
P. Abe	gatttcag	gtaaccacagtg...476...	atttcaaggtttatgccagt	GGGTat	TATTGGTGC	-ttttgaagttgaggtgaac...	104...	ccccccgcaag	caaaactg
C. Jac	tgattcag	gtaaccacagtg...467...	atttcaaggtttatgccagt	GGGTat	TATTGGTGC	-ttttgaagttgaggtgaac...	102...	ccccccgcaag	caaaactg
C. Por	gatttcag	gtacctatggtgta...464...	atttcaaggtttatgccagt	GGGTat	TATTGGTGC	-ttttgaagttgaggtgaac...	108...	ccccctgcaag	caaaactg
O. Cun	gatttcag	gtaaccacagtg...458...	atttcaaggtttatgccagt	GGGTat	TATTGGTGC	-ttttgaagttgaggtgaac...	103...	ccccccgcaag	caaaactg
C. Fam	gatttcag	gtaaccacagtg...464...	cattcaaggtatgtgccagt	GGGTat	TATTGGTGC	-ttttgaagttgaggtgaac...	102...	ccccctgcaag	caaaactg
B. Tau	gatttcag	gtgaccacagtg...463...	atttcaaggtttatgccagt	GGGTat	TATTGGTGC	-ttttgaagttgaggtgaac...	103...	ccccctgcaag	caaaactg
E. Cab	aatttcag	gtagctacagtg...487...	atttcaaggtttatgccagt	GGGTat	TATTGGTGC	-ttttgaagttgaggtgaac...	102...	ccccccgcaag	caaaactg
S. Sus	gatttcag	gtaaccatggtg...491...	atttcaaggtttatgccagt	GGGTat	TATTGGTGC	-ttttgaagttgaggtgaac...	101...	ccccctgcaag	caaaactg
O. Avi	gatttcag	gtgaccacagta...468...	atttcaaggtttatgccagt	GGGTat	TATTGGTGC	-ttttgaagttgaggtgaac...	105...	cccccgcgaag	caaaactg
L. Afr	aatttcag	gtaaccacagtg...479...	atttcaaggtttatgccagt	GGGTat	TATTGGTGC	-ttttgaagttgaggtgaac...	108...	ccccccgcaag	caaaactg
		* **	** * * **	****	* *****	*****	** *	****	*****

id=744424 gene=ENSG00000162775 name=RBM15 segment=chr1.110888272.110888929.1 type=IN

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R. Mac	gatttcag	gtaaccacagtg...593...	ttttaaatattgtaaacattt	GTA	CTgAATAACCT	-tttttccccctccgcaag	caaaactg	
P. Tro	gatttcag	gtaaccacagtg...594...	ttttaaatattgtaaacattt	GTA	CTgAATAACCT	-tttttccccctccgcaag	caaaactg	
P. Abe	gatttcag	gtaaccacagtg...593...	ttttaaatattgtaaacattt	GTA	CTgAATAACCT	-tttttccccctccgcaag	caaaactg	
C. Jac	tgattcag	gtaaccacagtg...584...	ttttaaatattgtaaacattt	GTA	CTgAATAACCT	-ttttt-ccccccgcaag	caaaactg	
C. Por	gatttcag	gtacctatggtgta...585...	ttttaaatattgtaaacattt	GTA	CTgAATAACCT	-tttttccccctccgcaag	caaaactg	
O. Cun	gatttcag	gtaaccacagtg...576...	ttttaaatattgtaaacattt	GTA	CTgAATAACCT	-ttttt-ccccccgcaag	caaaactg	
C. Fam	gatttcag	gtaaccacagtg...578...	ttttaaatattgtaaacattt	GTA	CTgAATAACCT	-tttttccccctccgcaag	caaaactg	
B. Tau	gatttcag	gtgaccacagtg...580...	ttttaaatattgtaaacattt	GTA	CTgAATAACCT	-tttttccccctccgcaag	caaaactg	
E. Cab	aatttcag	gtagctacagtg...604...	ttttaaatattgtaaacattt	GTA	CTgAATAACCT	-ttttt-ccccccgcaag	caaaactg	
S. Sus	gatttcag	gtaaccatggtg...607...	ttttaaatattgtaaacattt	GTA	CTgAATAACCT	-tttttccccctccgcaag	caaaactg	
O. Avi	gatttcag	gtgaccacagta...585...	ttttaaatattgtaaacattt	GTA	CTgAATAACCT	-tccccccgccaccgccgcaag	caaaactg	
L. Afr	aatttcag	gtaaccacagtg...602...	ttttaaatattgtaaacattt	GTA	CTgAATAACCT	-ttttt-ccccccgcaag	caaaactg	
		* **	** * * **	*****	*****	** *	****	*****

id=744424 gene=ENSG00000162775 name=RBM15 segment=chr1.110888272.110888929.1 type=IN VIEW

Figure 26: CS=7.8



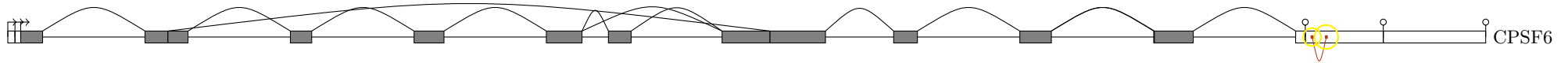
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R. Mac	tccgcaag	caaaactggtg...108...ttagtatt-tgtgcattttac	TAAAA	tgGCAGCTTAA	aGTTGTG	tatctgctattgtgatgcca-----	...176...ttttgaggaaaa	tgtttttc
P. Tro	tccgcaag	caaaactggtg...108...ttagtatt-tgtgcattttac	TAAAA	tgGCAGCTTAA	aGTTGTG	tatctgctattgtgatgcca-----	...175...ttttgaggaaaa	tgtttttc
P. Abe	cccgcaag	caaaactggtg...108...ttagtatt-tgtgcattttac	TAAAA	tgGCAGCTTAA	aGTTGTG	tatctgctattgtgatgcca-----	...175...ttttgaggaaaa	tgtttttc
C. Jac	cccgcaag	caaaactggtg...108...ttaatatt-tgtgcattttac	TAAAA	tgGCAGCTTAA	aGTTGTG	tatctgctattgtgatgcca-----	...175...ttttgaggaaaa	tgtttttc
M. Mus	cccgcaag	caaaactggtga...105...-tagtattttgtgcattttac	TAAAA	tgGCAGCTTAA	atTGTGta	TCTGctattgtgatgccaatgccg...166...ttttgaggaaaa	tgtttttc	
C. Por	cctgcaag	caaaactggtga...107...ttagtatt-tgtgcattttac	TAAAA	tgGCAGCTTAA	ctTGTG	tatctgctattgtgatgcca-----	...175...ttttgaggaaaa	tgtttttc
O. Cun	cccgcaag	caaaactggtga...107...ttagtatt-tgtgcattttac	TAAAA	tgGCAGCTTAA	aGTTGTG	tatctgctattgtgatgcca-----	...174...ttttgaggaaaa	tgtttttc
C. Fam	ctcgcaag	caaaactggtga...109...ttagtatt-tgtgcattttac	TAAAA	tgGCAGCTTAA	aGTTGTG	tatctgctattgtgatgcca-----	...173...ttttgaggaaaa	tgtttttc
B. Tau	cctgcaag	caaaactggtga...108...ttagtatt-tgtgcattttac	TAAAA	tgGCAGCTTAA	aGTTGTG	tatctgctattgtgatgcca-----	...167...ttttgaggaaaa	tgtttttc
E. Cab	cccgcaag	caaaactggtga...108...ttagtatt-tgtgcattttac	TAAAA	tgGCAGCTTAA	aGTTGTG	tatctgctattgtgatgcca-----	...174...ttttgaggaaaa	tgtttttc
S. Sus	cctgcaag	caaaactggtga...108...ttagtatt-tgtgcattttac	TAAAA	tgGCAGCTTAA	aGTTGTG	tatctgctattgtgatgcca-----	...173...ttttgaggaaaa	tgtttttc
O. Avi	cccgcaag	caaaactggtga...107...ttagtatt-tgtgcattttac	TAAAA	tgGCAGCTTAA	aGTTGTG	tatctgctattgtgatgcca-----	...168...ttttgaggaaaa	tgtttttc
L. Afr	cccgcaag	caaaactggtga...107...ttagtatt-tgtgcattttac	TAAAA	tgGCAGCTTAA	aGTTGTG	tatctgctattgtgatgcca-----	...174...ttttgaggaaaa	tgtttttc
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id=744425 gene=ENSG00000162775 name=RBM15 segment=chr1.110888930.110889299.1 type=EN

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R. Mac	tccgcaag	caaaactggtg...285...-----ctgtctctcaaacgtgcgct	CACAGTTGAGCTGCTTTTG	ttttattctaataaattgtttc	ttttgaggaaaa	tgtttttc
P. Tro	tccgcaag	caaaactggtg...284...-----ctgtctctcaaacgtgcgct	CACAGTTGAGCTGCTTTTG	ttttattctaataaattgtttc	ttttgaggaaaa	tgtttttc
P. Abe	cccgcaag	caaaactggtg...284...-----ctgtctctcaaacgtgcgct	CACAGTTGAGCTGCTTTTG	ttttattctaataaattgtttc	ttttgaggaaaa	tgtttttc
C. Jac	cccgcaag	caaaactggtg...284...-----ctgtctctcaaacgtgcgct	CACAGTTGAGCTGCTTTTG	ttttattctaataaattgtttc	ttttgaggaaaa	tgtttttc
M. Mus	cccgcaag	caaaactggtga...272...aagtagctgtcactcaaca	TGGGct	CACAGTTGAGCTGCTTTTG	ttttattctaataaattgtttc	ttttgaggaaaa
C. Por	cctgcaag	caaaactggtga...283...-----ctgtcactcaaacatgcgct	CACAGTTGAGCTGCTTTTG	ttttattctaataaattgtttc	ttttgaggaaaa	tgtttttc
O. Cun	cccgcaag	caaaactggtga...282...-----ctgtcactcaaacgtgcgct	CACAGTTGAGCTGCTTTTG	ttttattctaataaattgtttc	ttttgaggaaaa	tgtttttc
C. Fam	ctcgcaag	caaaactggtga...283...-----ctgtcactcaaacgtgcgct	CACAGTTGAGCTGCTTTTG	ttttattctaataaattgtttc	ttttgaggaaaa	tgtttttc
B. Tau	cctgcaag	caaaactggtga...276...-----ctgtcactcaaacgtgcgct	CACAGTTGAGCTGCTTTTG	ttttattctaataaattgtttc	ttttgaggaaaa	tgtttttc
E. Cab	cccgcaag	caaaactggtga...283...-----ctgtcactcaaacatgcgct	CACAGTTGAGCTGCTTTTG	ttttattctaataaattgtttc	ttttgaggaaaa	tgtttttc
S. Sus	cctgcaag	caaaactggtga...282...-----ctgtcactcaaacatgcgct	CACAGTTGAGCTGCTTTTG	ttttattctaataaattgtttc	ttttgaggaaaa	tgtttttc
O. Avi	cccgcaag	caaaactggtga...276...-----ctgtcactcaaacgtgcgct	CACAGTTGAGCTGCTTTTG	ttttattctaataaattgtttc	ttttgaggaaaa	tgtttttc
L. Afr	cccgcaag	caaaactggtga...282...-----ctgtcactcaaacatgcgct	CACAGTTGAGCTGCTTTTG	ttttattctaataaattgtttc	ttttgaggaaaa	tgtttttc
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id=744425 gene=ENSG00000162775 name=RBM15 segment=chr1.110888930.110889299.1 type=EN VIEW

Figure 27:



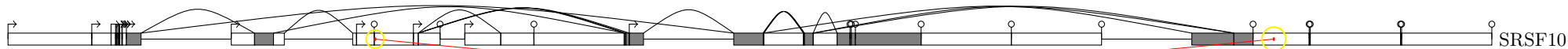
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R. Mac	catggggg-	aaaaatgacgcttgcca	GCAGTTTGCTtc	TTGT	gattgaactgaacctgtaag...315...	-tgtttaatgggg	ctgatgtg
P. Tro	catggggg-	aaaaatgacgcttgcca	GCAGTTTGCTtc	TTGT	gattgaactgaacctgtaag...315...	-tgtttaatgggg	ctgatgtg
P. Abe	catggggg-	aaaaatgacgcttgcca	GCAGTTTGCTtc	TTGT	gattgaactgaacctgtaag...315...	-tgtttaatgggg	ctgatgtg
M. Mus	ctcggggg-	aaaagtgacgcttgcca	GCAGTTTGCTtc	TTGT	gattgaactgaacctgtaag...313...	-ctgttta-tgggg	ctgatgtg
C. Por	catggggg-	aaaagtgacgcttgcca	GCAGTTTGCTtc	TTGT	gattgaactgaacctgtaag...318...	-tgtttaatgggg	ctgatgtg
O. Cun	catggggg-	-aaaatgacgcttgcca	GCAGTTTGCTtc	TTGT	gattgaactgaacctgtaag...313...	-tgtttaatgggg	ctgatgtg
C. Fam	catggggg-	aaaaatgacgcttgcca	GCAGTTTGCTtc	TTGT	gattgaactgaacctgtaag...316...	-tgtttaatgggg	ctgatgtg
F. Cat	catggggg-	aaaaatgacgcttgcca	GCAGTTTGCTtc	TTGT	gattgaactgaacctgtaag...319...	-tgttcaatgggg	ctgatgtg
B. Tau	tcttctgg-	aaaaatgacgcttatcca	GCAGTTTGCTtc	TTGT	gattgaactgaacctgtaag...320...	-tgtttaatgggg	ctgatgtg
E. Cab	catggggg-	-aaaatggcgcttgcca	GCAGTTTGCTtc	TTGT	gattgaactgaaccacaag...314...	-tgtttaatgggg	ctgatgtg
O. Avi	tcttctgg-	aaaaatgacgcttgcca	GCAGTTTGCTtc	TTGT	gattgaactgaacctgtaag...319...	-tgtttaatgggg	ctgatgtg
L. Afr	catggggg-	-aaaatgacgcttgcca	GCAGTTTGCTtc	TTGT	gattgaactgaacctgtaag...314...	-tgtttaatgggg	ctgatgtg
	**	*** ** *****	*****	***	**** * *****	*****	*****

id=422180 gene=ENSG00000111605 name=CPSF6 segment=chr12_69663339_69663719_1 type=E3

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R. Mac	catggggg-	aaaaatgacgct...	.56...	atgaacaggaatagatctga	ATAAAGCAAAt	CTGC	at-aaatggtaaccagtagct...246...	-tgtttaatgggg	ctgatgtg
P. Tro	catggggg-	aaaaatgacgct...	.56...	atgaacaggaatagatctga	ATAAAGCAAAt	CTGC	at-aaatggtaaccagtagct...246...	-tgtttaatgggg	ctgatgtg
P. Abe	catggggg-	aaaaatgacgct...	.56...	atgaacaggaatagatctga	ATAAAGCAAAt	CTGC	at-aaatggtaaccagtagct...246...	-tgtttaatgggg	ctgatgtg
M. Mus	ctcggggg-	aaaagtgacgct...	.56...	ctgaacaggaatagatctga	ATAAAGCAAAt	CTGC	at-aaatggtaaccagtagct...244...	-ctgttta-tgggg	ctgatgtg
C. Por	catggggg-	aaaagtgacgct...	.57...	ctgaacaggaatagatctga	ATAAAGCAAAt	CTGC	at-aaatggtaaccagtagct...249...	-tgtttaatgggg	ctgatgtg
O. Cun	catggggg-	-aaaatgacgctt...	.55...	atgaacaggaatagatctga	ATAAAGCAAAt	CTGC	at-aaatggtaaccagtagct...244...	-tgtttaatgggg	ctgatgtg
C. Fam	catggggg-	aaaaatgacgct...	.56...	atgaacaggaatagatctga	ATAAAGCAAAt	CTGC	at-aaatggtaaccagtagct...247...	-tgtttaatgggg	ctgatgtg
F. Cat	catggggg-	aaaaatgacgct...	.56...	atgaacaggaatagatctga	ATAAAGCAAAt	CTGC	ataaaatggtaaccagtagct...250...	-tgttcaatgggg	ctgatgtg
B. Tau	tcttctgg-	aaaaatgacgct...	.56...	atgaacaggaatagatctga	ATAAAGCAAAt	CTGC	at-aaatggtaaccagtagct...251...	-tgtttaatgggg	ctgatgtg
E. Cab	catggggg-	-aaaatggcgctt...	.55...	atgaacaggaatagatctga	ATAAAGCAAAt	CTGC	at-aaatggtaaccagtagct...245...	-tgtttaatgggg	ctgatgtg
O. Avi	tcttctgg-	aaaaatgacgct...	.56...	atgaacaggaatagatctga	ATAAAGCAAAt	CTGC	at-aaatggtaaccagtagct...250...	-tgtttaatgggg	ctgatgtg
L. Afr	catggggg-	-aaaatgacgctt...	.55...	atgaacaggaatagatctga	ATAAAGCAAAt	CTGC	at-aaatggtaaccagtagct...245...	-tgtttaatgggg	ctgatgtg
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id=422180 gene=ENSG00000111605 name=CPSF6 segment=chr12_69663339_69663719_1 type=E3 VIEW

Figure 28:



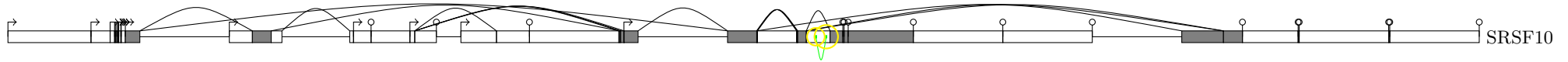
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P.Abe	gtacagtt-	atggcgacccca...57...agccaaagacctttaagga	TCAGGCTTG	AAGagaag
C.Jac	gtacagtt-	atggcgacccca...57...agccaaagacctttaagga	TCAGGCTTG	AAGagaag
M.Mus	gtacagtt-	atggagacccca...57...agccaaagacctttaagga	TCAGGCTTG	AAGagaag
R.Nor	gtacagtt-	atggcgacccca...57...agccaaagacctttaagga	TCAGGCTTG	AAGagaag
C.Por	gtacagtt-	atggcgacccca...57...agccaaagacctttaagga	TCAGGCTTG	AAGagaag
O.Cun	gtacagtt-	atggcgacccca...57...agccaaagacctttaagga	TCAGGCTTG	AAGagaag
C.Fam	gtacagtt-	atggcgacccca...57...agccaaagacctttaagga	TCAGGCTTG	AAGagaag
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id=594585 gene=ENSG00000188529 name=SRSF10 segment=chr1.24304645.24304742.-1 type=AN

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P.Tro	cmaaaggg	tgggtggaaggt...70...acatggaataattgaagtcc	CTTCAAGTTTGA	aagtaagcattttaggacaa...165...caaactgaa-ttg	ggtgggaa
P.Abe	cmaaaggg	tgggtggaaggt...70...acatggaataattgaagtcc	CTTCAAGTTTGA	aagtaagcattttaggacaa...165...caaactgaa-ttg	ggtgggaa
C.Jac	cmaaaggg	tgggtggaaggt...70...acatggaataattgaagtcc	CTTCAAGTTTGA	aagtaagcattttaggacaa...165...caaactgaa-ttg	ggtgggaa
M.Mus	cmaaaggg	tgggtggaaggt...68...acatggaataattgaagtcc	CTTCAAGTTTGA	aagtaagcattttaggacaa...165...caaattaaa-ttg	gatggtaa
R.Nor	cmaaaggg	tgggtggaaggt...68...acatggaataattgaagtcc	CTTCAAGTTTGA	aagtaagcattttaggacaa...166...caaattaaattg	gatggtaa
C.Por	cmaaaggg	tgggtggaaggt...66...acatggaataattgaagtcc	CTTCAAGTTTGA	aagtaagcattttaggacaa...162...caaactgaa-ttg	ggcgggaa
O.Cun	cmaaaggg	tgggtggaaggt...68...acatggaataattgaagtcc	CTTCAAGTTTGA	aagtaagcattttaggacaa...165...caaactgaa-ttg	ggtgggaa
C.Fam	cmaaaggg	tgggtggaaggt...69...acatggaataattgaagtcc	CTTCAAGTTTGA	aagtaagcattttaggacaa...165...caaactgaa-ttg	ggtgagaa
B.Tau	cmaaaggg	tgggtggaaggt...69...acatggaataattgaagtcc	CTTCAAGTTTGA	aagtaagcattttaggacaa...165...caaactgaa-ttg	ggtgagaa
E.Cab	cmaaaggg	tgggtggaaggt...69...acatggaataattgaagtcc	CTTCAAGTTTGA	aagtaagcattttaggacaa...165...caaatgaa-ttg	ggtgagaa
O.Avi	cmaaaggg	tgggtggaaggt...69...acatggaataattgaagtcc	CTTCAAGTTTGA	aagtaagcattttaggacaa...165...caaactgaa-ttg	ggtgagaa
L.Afr	cmaaaggg	tgggtggaaggt...70...acatggaataattgaagtcc	CTTCAAGTTTGA	aagtaagcattttaggacaa...165...caaacgaa-ttg	ggtgggaa
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id=594615 gene=ENSG00000188529 name=SRSF10 segment=chr1.24293797.24294107.-1 type=EN VIEW

Figure 29:



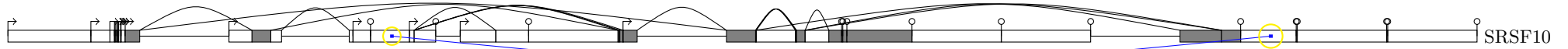
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P. Tro	aatgatag	gtaaataac-tttgctttgaaaagactc-----atgtatTTTT-----	TAATTtcAGAGTGAA-cttttgctctaaaataaca-...48...ctgttttgaaag	attcaaac
P. Abe	aatgatag	gtaaataac-tttgctttgaaaagactc-----atgtatTTTT-----	TAATTtcAGAGTGAA-cttttgctctaaaataaca-...48...ctgttttgaaag	attcaaac
C. Jac	aatgatag	gtaaataac-tttgctttgaaaagactc-----atgtatTTTT-----	TAATTtcAGAGTGAA-cttttgctctaaaataaca-...48...ctgttttgaaag	attcaaac
M. Mus	aatgatag	gtaaataac-tttgctttgaaaagactc-----atgtatTTTT-----	TAATTtcAGAGTGAA-cttttgctctaaaataaca-...48...ctgttttgaaag	attcaaac
R. Nor	aatgatag	gtaaataac-tttgctttgaaaagactc-----atgtatTTTT-----	TAATTtcAGAGTGAA-cttttgctctaaaataaca-...48...ctgttttgaaag	attcaaac
C. Por	aatgatag	gtaaataac-tttgctttgaaaagactc-----atgtatTTTT-----	TAATTtcAGAGTGAA-cttttgctctaaaataaca-...48...ctgttttgaaag	attcaaac
O. Cun	aatgatag	gtaaataac-tttgctttgaaaagactc-----atgtatTTTT-----	TAATTtcAGAGTGAA-cttttgctctaaaataaca-...48...ctgttttgaaag	attcaaac
C. Fam	aatgatag	gtaaataac-tttgctttgaaaagactc-----atgtatTTTT-----	TAATTtcAGAGTGAA-cttttgctctaaaataaca-...48...ctgttttgaaag	attcaaac
F. Cat	aatgatag	gtaaataac-tttgctttgaaaagactc-----atgtatTTTT-----	TAATTtcAGAGTGAA-cttttgctctaaaataaca-...48...ctgttttgaaag	attcaaac
B. Tau	aatgatag	gtaaataac-tttgctttgaaaagactc-----atgtatTTTT-----	TAATTtcAGAGTGAA-cttttgctctaaaataaca-...48...ctgttttgaaag	attcaaac
E. Cab	aatgatag	gtaaataac-tttgctttgaaaagactc-----atgtatTTTT-----	TAATTtcAGAGTGAA-cttttgctctaaaataaca-...48...ctgttttgaaag	attcaaac
O. Avi	aatgatag	gtaaataac-tttgctttgaaaagactc-----atgtatTTTT-----	TAATTtcAGAGTGAA-cttttgctctaaaataaca-...48...ctgttttgaaag	attcaaac
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id=594605 gene=ENSG00000188529 name=SRSF10 segment=chr1.24297930.24298062.-1 type=AN

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P. Tro	aatgatag	gtaaataacttt...66...gattaatatagaatctaattTTTACTCTAATTAtatctctcctctgttttgaaag	attcaaac
P. Abe	aatgatag	gtaaataacttt...67...gattaatatagaatctaattTTTACTCTAATTAtatctctcctctgttttgaaag	attcaaac
C. Jac	aatgatag	gtaaataacttt...66...gattaatatagaatctaattTTTACTCTAATTAtatctctcctctgttttgaaag	attcaaac
M. Mus	aatgatag	gtaaataacttt...85...gattaatatagaatctaattTTTACTCTAATTGtatctctcctctgttttgaaag	attcaaac
R. Nor	aatgatag	gtaaataacttt...65...gattaatatagaatctaattTTTACTCTAATTGtatctctcctctgttttgaaag	attcaaac
C. Por	aatgatag	gtaaataacttt...64...gattaatatagaatctaattTTTACTCTAATTGtatctctcctctgttttgaaag	attcaaac
O. Cun	aatgatag	gtaaataacttt...66...gattaatatagaatctaattTTTACTCTAATTGtatctctcctctgttttgaaag	attcaaac
C. Fam	aatgatag	gtaaataacttt...67...gattaatatagaatctaattTTTACTCTAATTGtatctctcctctgttttgaaag	attcaaac
F. Cat	aatgatag	gtaaataacttt...66...gattaatatagaatctaattTTTACTCTAATTGtatctctcctctgttttgaaag	attcaaac
B. Tau	aatgatag	gtaaataacttt...64...gattaatatagaatctaattTTTACTCTAATTGtatctctcctctgttttgaaag	attcaaac
E. Cab	aatgatag	gtaaataacttt...66...gattaatatagaatctaattTTTACTCTAATTGtatctctcctctgttttgaaag	attcaaac
O. Avi	aatgatag	gtaaataacttt...64...gattaatatagaatctaattTTTACTCTAATTGtatctctcctctgttttgaaag	attcaaac
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id=594605 gene=ENSG00000188529 name=SRSF10 segment=chr1.24297930.24298062.-1 type=AN VIEW

Figure 30:



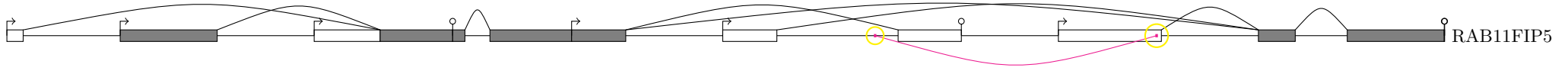
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P. Tro	caggcttg	aagagaagggag...70...-tatctacaaaagggggaaaa	GGTTG	TTTTCAAAGTAAAG	ataaagccatctgtcatatt...62...agttgaatgatg	gccaagat
P. Abe	caggcttg	aagagaagggag...70...-tatctacaaaagggggaaaa	GGTTG	TTTTCAAAGTAAAG	ataaagccatctgtcatatt...62...agttgaatgatg	gccaagat
C. Jac	caggcttg	aagagaagggag...70...-tatctacaaaagggggaaaa	GGTTG	TTTTCAAAGTAAAG	ataaagccatctgtcatatt...67...aattgaatgatg	gccaagat
M. Mus	caggcttg	aagagaagggag...69...ttatccac-aaagggggaaaa	GGTTG	TTTTCAAAGTAAAG	ataaagccatctgtcatatt...62...agttgaatgatg	gccaagat
R. Nor	caggcttg	aagagaagggag...69...ttatccac-aaagggggaaaa	GGTTG	TTTTCAAAGTAAAG	ataaagccatctgtcatatt...62...agttgaatgatg	gccaagat
C. Por	caggcttg	aagagaagggag...69...ttatctac-agagggggaaaa	GGTTG	TTTTCAAAGTAAAG	ataaagccatctgtcatatt...62...agttgaatgatg	gccaagat
O. Cun	caggcttg	aagagaagggat...71...-tatctacaaaagggggaaaa	GGTTG	TTTTCAAAGTAAAG	ataaagccatctgtcatatt...62...agttcaatgatg	gccaagat
C. Fam	caggcttg	aagagaagggag...70...-tatctacaaaagggggaaaa	GGTTG	TTTTCAAAGTAAAG	ataaagccatctgtcatatt...62...agttgaatgatg	gccaagat
B. Tau	caggcttg	aagagaagggag...70...-tatctacaaaagggggaaaa	GGTTG	TTTTCAAAGTAAAG	ataaagccatctgtcatatt...62...agttgaatgatg	gccaagat
E. Cab	caggcttg	aagagaagggag...70...-tatctacaaaagggggaaaa	GGTTG	TTTTCAAAGTAAAG	ataaagccatctgtcatatt...62...agttgaatgatg	gccaagat
O. Avi	caggcttg	aagagaagggag...70...-tatctacaaaagggggaaaa	GGTTG	TTTTCAAAGTAAAG	ataaagccatctgtcatatt...62...agttgaatgatg	gccaagat
L. Afr	caggcttg	aagagaagggag...70...-tatctacaaaagggggaaaa	GGTTG	TTTTCAAAGTAAAG	ataaagccatctgtcatatt...62...agttgaatgatg	gccaagat
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id=594586 gene=ENSG00000188529 name=SRSF10 segment=chr1.24304428.24304644.-1 type=AN

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P. Tro	ccaaaggg	tgggtggaaggt...118...acaataaaaaggaattcaa	CTTTG	ACTTG	TGGAAA	TAATC	cctaaatgatgaatagggtta...106...caaactgaa-ttg	ggtgggaa
P. Abe	ccaaaggg	tgggtggaaggt...118...acaataaaaaggaattcaa	CTTTG	ACTTG	TGGAAA	TAATC	cctaaatgatgaatagggtta...106...caaactgaa-ttg	ggtgggaa
C. Jac	ccaaaggg	tgggtggaaggt...118...acaataaaaaggaattcaa	CTTTG	ACTTG	TGGAAA	TAATC	cctaaatgatgaatagggtta...106...caaactgaa-ttg	ggtgggaa
M. Mus	ccaaaggg	tgggtggaaggt...116...acaataaaaaggaattcaa	CTTTG	ACTTG	TGGAAA	TAATC	cctaaatgatgaacagggtta...106...caaatgaa-ttg	gatggtaa
R. Nor	ccaaaggg	tgggtggaaggt...116...acaataaaaaggaattcaa	CTTTG	ACTTG	TGGAAA	TAATC	cctaaatgatgaacagggtta...107...caaatgaa-ttg	gatggtaa
C. Por	ccaaaggg	tgggtggaaggt...114...acaataaaaaggaattcaa	CTTTG	ACTTG	TGGAAA	TAATC	cctaaatgatgaacagggtta...103...caaactgaa-ttg	ggtgggaa
O. Cun	ccaaaggg	tgggtggaaggt...116...acaataaaaaggaattcaa	CTTTG	ACTTG	TGGAAA	TAATC	cctaaatgatgaatagggtta...106...caaactgaa-ttg	ggtgggaa
C. Fam	ccaaaggg	tgggtggaaggt...117...acaataaaaaggaattcaa	CTTTG	ACTTG	TGGAAA	TAATC	cctaaatctgaatagggtta...106...caaactgaa-ttg	ggtgagaa
B. Tau	ccaaaggg	tgggtggaaggt...117...acaataaaaaggaattcaa	CTTTG	ACTTG	TGGAAA	TAATC	cctaaatctgaatagggtta...106...caaactgaa-ttg	ggtgagaa
E. Cab	ccaaaggg	tgggtggaaggt...117...acaataaaaaggaattcaa	CTTTG	ACTTG	TGGAAA	TAATC	cctaaatctgaatagggtta...106...caaatgaa-ttg	ggtgagaa
O. Avi	ccaaaggg	tgggtggaaggt...117...acaataaaaaggaattcaa	CTTTG	ACTTG	TGGAAA	TAATC	cctaaatctgaatagggtta...106...caaactgaa-ttg	ggtgagaa
L. Afr	ccaaaggg	tgggtggaaggt...118...acaataaaaaggaattcaa	CTTTG	ACTTG	TGGAAA	TAATC	cctaaatgatgaatagggtta...106...caaacgaa-ttg	ggtgggaa
*****	*****	*****			*****	*****	**** * * * * *	*****

id=594615 gene=ENSG00000188529 name=SRSF10 segment=chr1.24293797.24294107.-1 type=EN VIEW

Figure 31:



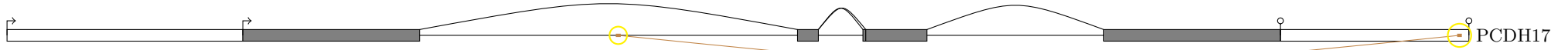
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R.Nor	accaaccg	gtttctatgcat...2931...	.ggttttgtctt-c-tccacagc	CTGGACGTGTCTCC	CAGGTAGAAA	tctgacc--agctgctctca...65...	acctttttgag	ccgcctcc
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O.Cun	accaacgg	gagcctgtacct...2040...	-gtttgtctccc-tccacagc	CTGGACGTGTCTCC	CAGGTAGAAA	tctgacc--agccgctctcc...77...	acctttttgag	tcgcctcc
F.Cat	accaacgg	gtttgtgtgtac...2346...	-gtttgtctccc-tccacagc	CTGGACGTGTCTCC	CAGGTAGAAA	ctgacc--agctgctcttcc...77...	acctttttgag	ccgcctcc
B.Tau	accaacgg	gttcgtgtgccc...2169...	-gtttgtctccc-cccacagc	CTGGACGTGTCTCC	CAGGTAGAAA	tctggcct--ggctgctcttcc...62...	accttggtgag	ccgcctcc
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R.Nor	tctcataa	ctcagccagctc...504...	cccagcctccccgcttgtgc	TTCTG	ccCTTGGAGACACG	CCAG	ctgaggacccccagcccagtgccag	gtgagcat
C.Por	ccatgtta	ttcagcaagctc...465...	cccagcctccccgcttgtgc	TTCTG	ccCTTGGAGACACG	CCAG	ctgaagagccacagcccagtgccag	gtgagcgt
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Figure 32: CS=10.14



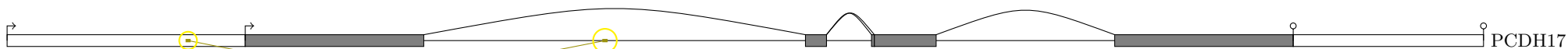
H. Sap	taattcag	gtaggagacttt...4943...-caactatacgtatTTTTTTC	CTTC	TTCa	CAG	A	cagacaa	
R. Mac	taattcag	gtaggagacttt...4943...-caactatacgtatTTTTTTC	CTTC	TTCa	CAG	A	cagacaa	
P. Tro	taattcag	gtaggagacttt...4943...-caactatacgtatTTTTTTC	CTTC	TTCa	CAG	A	cagacaa	
P. Abe	taattcag	gtaggagacttt...4943...-caactatacgtatTTTTTTC	CTTC	TTCa	CAG	A	cagacaa	
C. Jac	taattcag	gtaggagacttt...4943...-caactatacgtatTTTTTTC	CTTC	TTCa	CAG	A	cagacaa	
M. Mus	taattcag	gtaggagacttt...4943...-aactatacgtatTTTTTTC	CTTC	TTCa	CAG	ACAG	acaa	
R. Nor	taattcag	gtaggagacttt...4943...-aactatacgtatTTTTTTC	CTTC	TTCa	CAG	ACAG	acaa	
C. Por	taattcag	gtaggagacttt...4943...-caactatacgtatTTTTTTC	CTTC	TTCa	CAG	A	cagacaa	
O. Cun	taattcag	gtaggagacttt...4943...-caactatacgtatTTTTTTC	CTTC	TTCa	CAG	A	cagacaa	
C. Fam	taattcag	gtaggagacttt...4943...-caactatacgtatTTTTTTC	CTTC	TTCg	CAG	A	cagacaa	
F. Cat	taattcag	gtaggagacttt...4943...-caactatacgtatTTTTTTC	CTTC	TTCg	CAG	A	cagacaa	
B. Tau	taattcag	gtaggagacttt...4943...-caactatacgtatTTTTTTC	CTTC	TTTT	Cg	CAG	A	cagacaa
E. Cab	taattcag	gtaggagacttt...4943...-acaactatacgtatTTTTTTC	CTTC	TTCg	CAG	A	cagacaa	
S. Sus	taattcag	gtaggagacttt...4943...-caactatacgtatTTTTTTC	CTTC	TTCg	CAG	A	cagacaa	
O. Avi	taattcag	gtaggagacttt...4943...-caactatacgtatTTTTTTC	CTTC	TTTT	Cg	CAG	A	cagacaa
	*****	*** ** *	*****	****	** * **	*****		

id=625977 gene=ENSG00000118946 name=PCDH17 segment=chr13_58209246_58240601.1 type=IN

H. Sap	---aagaaaa	ggagagatgaaa...3677...-gctgtgtttaatgtgatcta	TCTGGAAA	atGAGG	actccgaataaaaagctattactaata	gtggtgtt
R. Mac	---aagaaaa	ggagagaagaaa...3686...-gctgtgtttaatgtgaccta	TCTGGAAA	atGAGG	actctgaataaaaacattactaata	gtggtgtt
P. Tro	---aagaaaa	ggagagacgaaa...3676...-gctgtgtttaatgtgatcta	TCTGGAAA	atGAGG	actccgaataaaaagctattactaata	gtggtgtt
P. Abe	---aagaaaa	ggagagacaaaa...3677...-gctgtgtttaatgtgatcta	TCTGGAAA	atGAGG	actccgaataaaaagctattactaata	gtggtgtt
C. Jac	---aagaaaa	ggagagaagaaa...3664...-gctgtgtttaatgtgaccta	TCTGGAAA	atGAGG	attccgaataaaaagctattactaata	gtggtgtt
M. Mus	---aagaaatt	ggaaagacgcaa...3675...atggctgtgtttcatgtgac	CTGTCTGGAAA	atGAGG	actctgaat-aaaagctattactaata	gcggtgtt
R. Nor	---aagaaatt	ggagagaagaaa...3711...atggctgtgtttcatgtgac	CTGTCTGGAAA	atGAGG	actccgaat-aaaagctattactaata	gtggtgtt
C. Por	---cagaagat	agagagaagaaa...3675...-gctgtgtttaatgtgaccta	TCTGGAAA	atGAGG	actccgaataaaaagctattactaata	gtgatgtt
O. Cun	agaaagaacaa	ggagagaac-----3697...-gctgtgtttaatgtgaccta	TCTGGAAA	atGAGG	actccgaataaaaagctattactaata	gtggcgtt
C. Fam	---aagagaaa	agaaagaagaaa...3690...-gctgtgtttaatgtgaccta	TCTGGAAA	atGAGG	actccgaataaaaagctattactaata	gtggcgtt
F. Cat	---aagaaaa	ggaaagaagaca...3317...-gctgtgtttaatgtgaccta	TCTGGAAA	atGAGG	actccgaataaaaagctattactaata	gcggtgtt
B. Tau	---aagaaaa	ggagaggagata...3695...-gctgtgtttaatgtgaccta	TCTGGAAA	atGAGG	actctgaataaaaagctattactaata	ctggtgtt
E. Cab	---aagaaaa	agggagaagaaa...3713...-gctgtgtttaatgtgaccta	TCTGGAAA	atGAGG	actccgaataaaaagctattactaata	gtggtgtt
S. Sus	---gagaagaa	ggagagaagaaa...3688...-gctgtgtttaatgtgaccta	TCTGGAAA	atGAGG	actccgaataaaaagctattactaata	gtggtgtt
O. Avi	---gaaaaa	ggagaggagttaa...3697...-gctgtgtttaatgtgaccta	TCTGGAAA	atGAGG	actcgaataaaaagctattactaata	gtggtgtt
	**	* **	*****	*****	** *****	** *****

id=625984 gene=ENSG00000118946 name=PCDH17 segment=chr13_58299696_58303445.1 type=E3 VIEW

Figure 33:



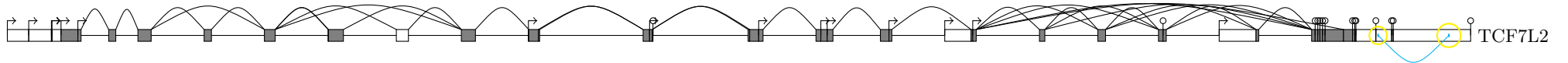
H. Sap	cttggctg	gtagatgcagtc...	502...	cttctcaccagtcg	cgatg	CTGTAGAt	CAACAGGTT	cagggaacttgagcagaat-a...	128...	cagtccgattgc	tcctgccc
R. Mac	cttggctg	ggagatgcagtc...	502...	cttctcaccagtcg	cgatg	CTGTAGAt	CAACAGGTT	caggcaacttgagcggaaat-a...	128...	cagtccggctgt	tcctgccc
P. Tro	cttggctg	ggagatgcagtc...	502...	cttctcaccagtcg	cgatg	CTGTAGAt	CAACAGGTT	cagggaacttgagcagaat-a...	128...	cagtccgattgc	tcctgccc
C. Jac	cttggctg	ggagatgcagtc...	502...	cttctctcccagtcg	cgatg	CTGTAGAt	CAACAGGTT	cagggaacttgagctgaat-a...	128...	cagtccgcctgt	tcctgccc
M. Mus	cttggctc	ggagatgcagtc...	508...	catctctcccagtcg	cgaaatg	CTGTAGAt	CAACAGGTT	cgggcaacttgagcggaaat-a...	128...	cagtccggctgc	tcctgttc
R. Nor	cttggctc	gcagatgcagtc...	511...	catctctctgtg	cgaaatg	CTGTAGAt	CAACAGGTT	cgggcaacttgagcggaaat-a...	128...	cagtccggctgc	tcctgttc
C. Por	cttggctg	ggagatgcagtc...	503...	cctctcaccagtcg	cgatg	CTGTAGAt	CAACAGGTT	cagggaacttgaacagaat-a...	127...	cagtccggctgt	tcctgccc
O. Cun	ctcggctg	ggagatgcagtc...	509...	gctctcgccagtcg	cgatg	CTGTAGAt	CAACAGGTT	cggggaacttgagcggaaat-a...	125...	aagtcggctgc	tcctgccc
C. Fam	cttggctg	ggagatgcagtc...	526...	cttcgccccagtcg	cgatg	CTGTAGAt	CAACAGGTT	cggggaacttgagcggaaat-a...	133...	cggtcggctgc	tcctgccc
F. Cat	cttggctg	ggagatgcagtc...	493...	cttctcgccggtg	cgatg	CTGTAGAt	CAACAGGTT	cggggaacttgaacgaaat-a...	126...	cagttcgctgc	tcctgccc
B. Tau	cttggctt	ggagatgcagtc...	496...	ctccagcccagtcg	cgatg	CTGTAGAt	CAACAGGTT	cggggaacttgagcggaaat-a...	129...	cagtccggctgc	ttctgcca
E. Cab	cttggctg	ggagatgcagtc...	500...	cttctcgccccagtcg	cgatg	CTGTAGAt	CAACAGGTT	cggggaacttgagcggaaat-a...	126...	cagtccggctgc	tcctgtcc
S. Sus	cttggctg	ggagatgcagtc...	500...	cttctcgccccagtcg	cgatg	CTGTAGAt	CAACAGGTT	cagggaacttgaaccgaaat-a...	128...	cagtccggctgc	tcctgcca
L. Afr	cttggctg	ggagatgcagtc...	503...	cttctcgaacagtcg	cgatg	CTGTAGAt	CAACAGGTT	c-ggggaacttgagcagaatca...	127...	cagtccggctgc	ttctgccc
	** ** ** *	* ** ** ** ** *		* ** ** ** *		** ** ** *		** ** ** *		** ** ** *	* ** ** *

id=625975 gene=ENSG00000118946 name=PCDH17 segment=chr13_58205944_58206654.1 type=E5

H. Sap	taattcag	gtaggagacttt...	4888...	taatcattttccactagga	AATCTt	GTTGc	TCTGCAG	gagatttgtccagtg	tacaactatacgt	a-tttttttc	cttctctttcacag	acagacaa
R. Mac	taattcag	gtaggagacttt...	4888...	taatcattttccactagga	AATCTt	GTTGc	TCTGCAG	gagatttgtccagtg	tacaactatacgt	a-tttttttc	cttctctttcacag	acagacaa
P. Tro	taattcag	gtaggagacttt...	4888...	taatcattttccactagga	AATCTt	GTTGc	TCTGCAG	gagatttgtccagtg	tacaactatacgt	a-tttttttc	cttctctttcacag	acagacaa
C. Jac	taattcag	gtaggagacttt...	4888...	taatcattttccactagga	AATCTt	GTTGc	TCTGCAG	gagatttgtccagtg	tacaactatacgt	a-tttttttc	cttctctttcacag	acagacaa
M. Mus	taattcag	gtaggagacttt...	4887...	taatcattttccactagga	AATCTt	GTTGc	TCTGCAG	gagatttgtccagtg	tacaactatacgt	a-tttttttc	cttctctttcacag	acagacaa
R. Nor	taattcag	gtaggagacttt...	4887...	taatcattttccactagga	AATCTt	GTTGc	TCTGCAG	gagatttgtccagtg	tacaactatacgt	a-tttttttc	cttctctttcacag	acagacaa
C. Por	taattcag	gtaggagacttt...	4888...	taatcattttccactagga	AATCTt	GTTGc	TCTGCAG	gagatttgtccagtg	tacaactatacgt	a-tttttttc	cttctctttcacag	acagacaa
O. Cun	taattcag	gtaggagacttt...	4888...	taatcattttccactagga	AATCTt	GTTGc	TCTGCAG	gagatttgtccagtg	tacaactatacgt	a-tttttttc	cttctctttcacag	acagacaa
C. Fam	taattcag	gtaggagacttt...	4888...	taatcattttccactagga	AATCTt	GTTGc	TCTGCAG	gagatttgtccagtg	tacaactatacgt	a-tttttttc	cttctctttcacag	acagacaa
F. Cat	taattcag	gtaggagacttt...	4888...	taatcattttccactagga	AATCTt	GTTGc	TCTGCAG	gagatttgtccagtg	tacaactatacgt	a-tttttttc	cttctctttcacag	acagacaa
B. Tau	taattcag	gtaggagacttt...	4888...	taatcattttccactagga	AATCTt	GTTGc	TCTGCAG	gagatttgtccagtg	tacaactatacgt	a-tttttttc	cttctctttcacag	acagacaa
E. Cab	taattcag	gtaggagacttt...	4889...	taatcattttccactagga	AATCTt	GTTGc	TCTGCAG	gagatttgtccagtg	tacaactatacgt	a-tttttttc	cttctctttcacag	acagacaa
S. Sus	taattcag	gtaggagacttt...	4888...	taatcattttccactagga	AATCTt	GTTGc	TCTGCAG	gagatttgtccagtg	tacaactatacgt	a-tttttttc	cttctctttcacag	acagacaa
L. Afr	taattcag	gtaggagacttt...	4888...	taatcattttccactagga	AATCTt	GTTGc	TCTGCAG	gagatttgtccagtg	tacaactatacgt	a-tttttttc	cttctctttcacag	acagacaa
	*****	*** ** *		*****		*****		*****		*****	*** ** *	*****

id=625977 gene=ENSG00000118946 name=PCDH17 segment=chr13_58209246_58240601.1 type=IN VIEW

Figure 34: CS=6.72



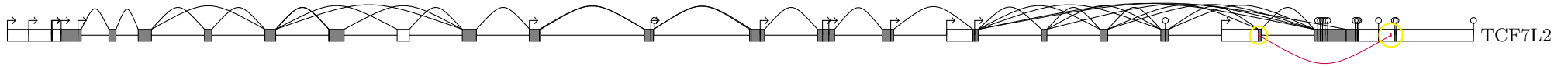
H. Sap	ctcctttt	aaatat-----	GTAGAT-gAGAGAAGAA	---cctcatgattctacaaaat--...	95...	--tgattaaaaaac	aaaaagaa
R. Mac	ctcctttt	aaatat-----	GTAGAT-gAGAGAAGAA	---cctcatgattctacaaaat--...	95...	--tgattaaaaaac	aaaaagaa
P. Tro	ctcctttt	aaatat-----	GTAGAT-gAGAGAAGAA	---cctcatgattctacaaaat--...	95...	--tgactaaaaaac	aaaaagaa
P. Abe	ctcctttt	aaatat-----	GTAGAT-gAGAGAAGAA	---cctcatgattctacaaaat--...	95...	--tgattaaaaaac	aaaaagaa
C. Jac	ctcctttt	aaatat-----	GTAGAT-gAGAGAAGAA	---cctcatgattctacaaaat--...	95...	--tgattaaaaaac	aaaaagaa
M. Mus	ctcctttt	aaatatgtagat---gagaaaaac	ctcatgattctacaaaatTTTTATcaACAGCtGTTTAA	aagtcctttagcgtttaaa--...	58...	--gattaaaaaac	aaaaagaa
R. Nor	ctcctttt	aaatatgtagat---gagagaaac	ctcatgattctacaaaatTTTTATcaACAGCtGTTTAA	aagtcctttagcgtttaaa--...	64...	--gattaaaggaac	aaaaagaa
C. Por	ctcctttt	aaatac-----	GTAGAT-gAGAGAAGAA	---cctcatgattctacaaaat--...	108...	--tgattaaaaaac	aaaaagaa
O. Cun	ctcctttt	aaatat-----	GTAGAT-gAGAGAAGAA	---acctcataattctacaaaa--...	98...	..gatga-aaaaagc	aaaaagaa
C. Fam	ctcctttt	aaatat-----	GTAGAT-gAGAGAAGAA	---acctcatgattctacaaaa--...	96...	--tgattaaaaaac	aaaaagaa
B. Tau	ctcctttt	aaatat-----	GTAGAT-gAGAGAAGAAACC	---tcatgattctacaaaat--...	93...	--tgattaaaaaac	aaaaagaa
E. Cab	ctcctttt	aaatat-----	GTAGAT-gAGAGAAGAA	---cctcatgattctacaaaat--...	95...	--tgattaaaaaac	aaaaagaa
S. Sus	ctcctttt	aaatatgtagattgagagaagaac	ctcatgattctacaaaatTTTTATcaACAGCtGTTTAA	aagtcctttagcgttgaa--...	57...	--tgattaaaaaac	aaaaagaa
O. Avi	ctcctttt	aaatat-----	GTAGAT-gAGAGAAGAAACC	---tcatgattctacaaaat--...	93...	--tgattaaaaaac	aaaaagaa
L. Afr	ctcctttt	aaatat-----	GTAGAT-gAGAGAAGAA	---cctcatgattctacaaaat--...	97...	--tgattaaaaaac	aaaaagaa
	*****	*****	* ** * **	** * *	**	** *	***** *

id=287491 gene=ENSG00000148737 name=TCF7L2 segment=chr10.114925920.114926068.1 type=EN

H. Sap	---aaaaaaa	gcaattttgaag...1102...	--gattgtaaaactgtctccgaTTTTTCTCTgGTTTAT	---taaatgctaactataacat...172...	tgtgcagataaa	ggctggtc
R. Mac	aaaaaaaagaa	gcaattttgaag...1112...	--gattgtaaaactgtctccgaTTTTTCTCTgGTTTAT	---taaatgctaactataacat...172...	tgtgcagataaa	ggctggtc
P. Tro	---aaaaaaa	gcaattttgaag...1108...	--gattgtaaaactgtctccgaTTTTTCTCTgGTTTAT	---taaatgctaactataacat...172...	tgtgcagataaa	ggctggtc
P. Abe	---aaaaaaa	gcaattttgaag...1103...	--gattgtaaaactgtctccgaTTTTTCTCTgGTTTAT	---taaatgctaactataacat...173...	tgtgcagataaa	ggctggtc
C. Jac	---aaaaaaa	gcaattttgaag...1123...	--gattgtaaaactgtctccgaTTTTTCTCTgGTTTAT	---taaatgctaactataacat...172...	tgtgcagataaa	gtctggtc
M. Mus	---agagagaa	gcaattttgaag...1090...	acctaggcatgccgatgtg----TAAAATGCTGTATAAAG	ctgagacctgttccttcagt...270...	tatgtgcagaaa	ggctggcc
R. Nor	---agagagaa	gcaactttgaag...1049...	acctaggcatgccgatgtg----TAAAATGCTGTATAAAG	ccgagacctgtctttcagt...249...	tatgtgcagaaa	ggctggtc
C. Por	---ggagagaa	gcgattttgaag...1125...	--gattgtaaaactgtctctgaTTTTTCTCTgGTTTAT	---taaatgctaactataacat...172...	tgtgcagataaa	ggctggtc
O. Cun	---aaaaaaa	acgattttgaag...1179...	--gattgtaaaactgtctccgaTTTTTCTCTgGTTTAT	---taaatgctaactataacat...172...	tgtgcagataaa	ggctggcc
C. Fam	---aagaagaa	gcaattttgaag...1114...	--gattgtaaaactgtctccaaTTTTTCTCTgGTTTAT	---taaatgctaactataacat...172...	tgtgcagatcaa	ggctggcc
B. Tau	---aaaaagaa	gcaattttgaag...1115...	gcgattgtaaaactgtctccGGTTTTTCTCTgGTTTAT	---taaatgctaactataacat...173...	tgtgcagataaa	ggctggtc
E. Cab	---aaaaaaa	gcgattttgaag...1123...	--gattgtaaaactgtctccgaTTTTTCTCTgGTTTAT	---taaatgctaactataacat...172...	tgtgcagaccaa	ggctgttt
S. Sus	---aaaaagaa	gcaattttgaag...1049...	ctaggcatgttgatgttaca----AAATGCTGTATAAAG	ctgaaacctgttcattcagt...250...	tgtgcagataaa	ggctggtc
O. Avi	---aaaaaaa	gcaattttgaag...1125...	gcgattgtaaaactgtctccGGTTTTTCTCTgGTTTAT	---taaatgctaactataacat...173...	tgtgcagataaa	ggctggtc
L. Afr	---gaaaagaa	gcaattttgaag...1118...	--gattgtaaaactgtctccaaTTTTTCTCTgGTTTAT	---taaatgctaactataacat...170...	tgtgcagataca	ggctggtc
	* **	* * ****	* * * *	** * **	** * *	* ** * *

id=287493 gene=ENSG00000148737 name=TCF7L2 segment=chr10.114926084.114927437.1 type=E3 VIEW

Figure 36:



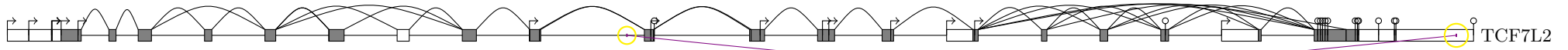
H.Sap	gacattgt	tttacagtgctg...298...tggttaaatgtgttgtttct	TTGTTCTGATACAAGCAG	Tccttgaa
R.Mac	gacattgt	tttacagtgctg...295...tggttaaatgtgttgtttct	TTGTTCTGATACAAGCAG	Tccttgaa
P.Tro	gacattgt	tttacagtgctg...296...tggttaaatgtgttgtttct	TTGTTCTGATACAAGCAG	Tccttgaa
P.Abe	gacattgt	tttacagtgctg...296...tggttaaatgtgttgtttct	TTGTTCTGATACAAGCAG	Tccttgaa
C.Jac	gacattgt	tttacagtgctg...296...tggttaaatgtgttgtttct	TTGTTCTGATACAAGCAG	Tccttgaa
M.Mus	gacattgt	tttacagtgctg...308...tggttaaatgtgttgtttct	TTGTTCTGATACAAGCAG	Tccttgaa
R.Nor	gacattgt	tttacagtgctg...308...cggttaaatgtgttgtttct	TTGTTCTGATACAAGCAG	Tccttgaa
C.Por	gacattgt	tttacagatgtg...273...cagttaaatgtgttgtttct	TTGTTCTGATACAAGCAG	Tccttgaa
O.Cun	aaccttgt	tttacagtgctg...314...tggttaaatgtgttgtttct	TTGTTCTGATACAAGCAG	Tccttgaa
C.Fam	gacattgt	tttacagtgctg...303...tggttaaatgtgttgtttct	TTGTTCTGATACAAGCAG	Tccttgaa
B.Tau	gacattgt	tttacagtgctg...300...tggttaaatgtgttgtttct	TTGTTCTGATACAAGCAG	Tccttgaa
E.Cab	gacattgt	tttacagtgctg...290...tggttaaatgtgttgtttct	TTGTTCTGATACAAGCAG	Tccttgaa
S.Sus	gacattgt	tttacagtgctg...316...tggttaaatgtgttgtttct	TTGTTCTGATACAAGCAG	Tccttgaa
L.Afr	gacattgt	tttacagtgctg...297...tggttaaatgtgttgtttct	TTGTTCTGATACAAGCAG	Tccttgaa
	** ****	***** **	***** *****	*****

id=287478 gene=ENSG00000148737 name=TCF7L2 segment=chr10.114920990.114921337.1 type=AN

H.Sap	ctcctttt	aaatatgtagat...68...aaaatata-tatatatacata	ACTGTTaTGTAgtTCGGATAG	ccttagtttt-aaaagactga-ttaaaaaac	aaaaagaa
R.Mac	ctcctttt	aaatatgtagat...68...aaaatata-tatatatacata	ACTGTTaTGTAgtTCGGATAG	ccttagtttt-aaaagactga-ttaaaaaac	aaaaagaa
P.Tro	ctcctttt	aaatatgtagat...68...aaaatata-tatatatacata	ACTGTTaTGTAgtTCGGATAG	ccttagtttt-aaaagactga-ctaaaaaac	aaaaagaa
P.Abe	ctcctttt	aaatatgtagat...68...aaaatata-tatatatacata	ACTGTTaTGTAgtTCGGATAG	ccttagtttt-aaaagactga-ttaaaaaac	aaaaagaa
C.Jac	ctcctttt	aaatatgtagat...68...aaaatata-tatatatacata	ACTGTTaTGTAgtTCGGATAG	ccttagtttt-aaaagactga-ttaaaaaac	aaaaagaa
M.Mus	ctcctttt	aaatatgtagat...67...-aaatatattatatatacata	ACTGTTaTGTAgtTCGGATAG	ccttagtttt-aaaagactgatttaaaaaac	aaaaagaa
R.Nor	ctcctttt	aaatatgtagat...73...tataaata-tatatatacata	ACTGTTaTGTAgtTCGGATAG	ccttagtttt-aaaagactgatttaaggaac	aaaaagaa
C.Por	ctcctttt	aaatacgtagat...81...tatatata-tatatatacata	ACTGTTaTGTAgtTCGGATAG	ccttagtttt-aaaagactga-ttaaaaaac	aaaaagaa
O.Cun	ctcctttt	aaatatgtagat...68...aatatata-tatatatacata	ACTGTTaTGTAgtTCGGATAG	ccttagtttt-aaaagactgatgaaaaaac	aaaaagaa
C.Fam	ctcctttt	aaatatgtagat...69...aaaatata-tatatatacata	ACTGTTaTGTAgtTCGGATAG	ccttagtttt-aaaagactga-ttaaaaaac	aaaaagaa
B.Tau	ctcctttt	aaatatgtagat...68...aatatata-tatatatacata	ACTGTTaTGTAgtTCGGATAG	ccttagtttt-aaaagactga-ttaaaaaac	aaaaagaa
E.Cab	ctcctttt	aaatatgtagat...68...aaaatata-tatatatacata	ACTGTTaTGTAgtTCGGATAG	ccttagtttt-aaaagactga-ttaaaaaac	aaaaagaa
S.Sus	ctcctttt	aaatatgtagat...69...aaaatata-tatatatacata	ACTGTTaTGTAgtTCGGATAG	ccttagtttt-aaaagactga-ttaaaaaac	aaaaagaa
L.Afr	ctcctttt	aaatatgtagat...70...aatatata-tatatatacata	ACTGTTaTGTAgtTCGGATAG	ccttagtttt-aaaagactga-ttaaaaaag	aaaaagaa
	*****	***** *****	* * * * *	***** ** *	***** *

id=287491 gene=ENSG00000148737 name=TCF7L2 segment=chr10.114925920.114926068.1 type=EN VIEW

Figure 37: CS=4.2



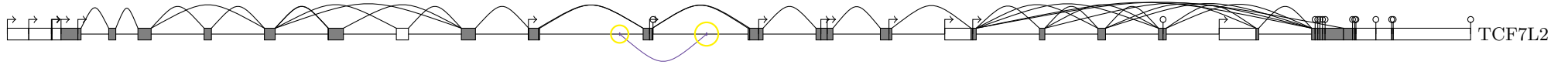
H. Sap	gtaccaca	gtaaggagtcc...1772..	--gccattcctatcagatttat	----	GGCA	----	TTCAAATGTTCT	gtgtttcttccctttgatc	---	133...	ccttctttgtag	gcaaggtc
R. Mac	gtaccaca	gtaaggagtcc...1734..	--gccattcctatcagatttat	----	GGCA	----	TTCAAATGTTCT	gtgtttcttccctttgatc	---	133...	ccttctttgtag	gcaaggtc
P. Tro	gtaccaca	gtaaggagtcc...1761..	--gccattcctatcagatttat	----	GGCA	----	TTCAAATGTTCT	gtgtttcttccctttgatc	---	133...	ccttctttgtag	gcaaggtc
P. Abe	gtaccaca	gtaaggagtcc...1750..	--gccattcctatcagatttat	----	GGCA	----	TTCAAATGTTCT	gtgtttcttccctttgatc	---	133...	ccttctttgtag	gcaaggtc
C. Jac	gtaccaca	gtaaggagtcc...1720..	--gccattcctatcagatttat	----	GGCA	----	TTCAAATGTTCT	gtgtttcttccctttgatc	---	133...	ccttctttgtag	gcaaggtc
M. Mus	gtaccaca	gtaagcaatcc...1658..	--gccattcctatcagatttat	----	GGCA	----	TTCAAATGTTCT	gtgtttcttccctttgatc	---	139...	ccttctttgtag	gcaaggtc
R. Nor	gtaccaca	gtaagcagtcc...2193..	--gccattcctatcagatttat	----	GGCA	----	TTCAAATGTTCT	gtgtttcttccctttgatc	---	146...	ccttctttgtag	gcaaggtc
C. Por	gtaccaca	gtaaggagtcc...1679..	--gccattcctatcagatttat	----	GGCA	----	TTCAAATGTTCT	gtgtttcttccctttgatc	---	133...	ccttctttgtag	gcaaggtc
O. Cun	gtaccaca	gtaaggagtcc...1818..	--gccattcctatcagatttat	----	GGCA	----	TTCAAATGTTCT	gtgtttcttccctttgatc	---	136...	ccttctttgtag	gcaaggtc
C. Fam	gtaccaca	gtaaggagtcc...1745..	--gccattcctatcagatttat	----	GGCA	----	TTCAAATGTTCT	gtgtttcttccctttgatc	---	134...	ccctctcatag	gcaaggtc
B. Tau	gtaccaca	gtaaggagtcc...1788..	--gccattcctatcagatttat	----	GGCA	----	TTCAAATGTTCT	gtgtttcttccctttgatc	---	134...	cgctctttgtag	gcaaggcc
E. Cab	gtaccaca	gtaaggagtcc...1743..	--gccattcctatcagatttat	----	GGCA	----	TTCAAATGTTCT	gtgtttcttccctttgatc	---	134...	ctctctttgtag	gcaaggtc
S. Sus	gtaccaca	gtaaggagtcc...1587..	--gccattcctatcagatttat	----	GGCA	----	TTCAAATGTTCT	gtgtttcttccctttgatc	---	135...	ccttctttgtag	gcaaggtc
O. Avi	gtaccaca	gtaaggagtcc...1473..	cgtaactctgtcaact	TGTTa	ATTTGACAAAAGGCT	aCAAATTA	----	agctctgtaatttaattgt	...	436...	cgctctttgtag	gcaaggtc
L. Afr	gtaccaca	gtaaggagtcc...1830..	--gccattcctatcagatttat	----	GGCA	----	TTCAAATGTTCT	gtgtttcttccctttgatc	---	130...	ccctctttgtag	gcaaggtc
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id=287451 gene=ENSG00000148737 name=TCF7L2 segment=chr10.114903785.114905769.1 type=IN

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R. Mac	aaaaaaagaa	gcaatthtgaag...1155...	ctaactataaca	---t-tttttgt	GAATA	TTTGAATGTT	-----	tcctaacagttgtgatgt	---ta...	129...	tgtgcagataaa	ggctggtc	
P. Tro	---aaaaaaa	gcaatthtgaag...1151...	ctaactataaca	---t-tttttgt	GAATA	TTTGAATGTT	-----	tcctaacagttgtgatgt	---ta...	129...	tgtgcagataaa	ggctggtc	
P. Abe	---aaaaaaa	gcaatthtgaag...1147...	taactataaca	---t-tttttgt	GAATA	TTTGAATGTT	-----	tcctaacagttgtgatgt	---ta...	129...	tgtgcagataaa	ggctggtc	
C. Jac	---aaaaaaa	gcaatthtgaag...1166...	ctaactataaca	---t-tttttgt	GAATA	TTTGAATGTT	-----	tcctaacagttgtgatgt	---ta...	129...	tgtgcagataaa	gtctggtc	
M. Mus	---agagagaa	gcaatthtgaag...1228...	ttttcttt	---t-tttttgt	GAATA	TTTGAATGTC	-----	tcctaacagttgtggtgt	---t...	133...	tatgtgcagaaa	ggctggcc	
R. Nor	---agagagaa	gcaactthtgaag...1174...	ctataacaatttt	---t-tttttgt	GAATA	TTTGAATGTT	-----	tcctaacagttgtggtgt	---ta...	125...	tatgtgcagaaa	ggctggtc	
C. Por	---ggagagaa	gcgattthtgaag...1168...	ctaactataaca	---t-tttttgt	GAATA	TTTGAATGTT	-----	tcctaacagttgtgatgt	---ta...	129...	tgtgcagataaa	ggctggtc	
O. Cun	---aaaaaaa	acgattthtgaag...1221...	ctaactataaca	---t-tttttgt	GAATA	TTTGAATGTT	-----	tcctaacagttgtgatgt	---ta...	129...	tgtgcagataaa	ggctggcc	
C. Fam	---aagaagaa	gcaatthtgaag...1157...	ctaactataaca	---t-tttttgt	GAATA	TTTGAATGTT	-----	tcctaacagttgtgatgt	---ta...	129...	tgtgcagataaa	ggctggcc	
B. Tau	---aaaaagaa	gcaatthtgaag...1161...	taactataaca	---t-tttttgt	GAATA	TTTGAATGTT	-----	tcctaacagttgtgatgt	---ta...	129...	tgtgcagataaa	ggctggtc	
E. Cab	---aaaaaaa	gcgattthtgaag...1166...	ctaactataaca	---t-tttttgt	GAATA	TTTGAATGTT	-----	tcctaacagttgtgatgt	---ta...	129...	tgtgcagaccaa	ggctggtt	
S. Sus	---aaaaagaa	gcaatthtgaag...1169...	ctaactataaca	---t-tttttgt	GAATA	TTTGAATGTT	-----	tcctaacagttgtgatgt	---ta...	129...	tgtgcagataaa	ggctggtc	
O. Avi	---aaaaaaa	gcaatthtgaag...1246...	-----	tattccaatttcatttttaa	---	TGGTTTGgaAGCCat	TTTTTGTaa	TGAATAAATG	ttcat	---	gctgtacagtatctg...	37...tgtgcagataaa	ggctggtc
L. Afr	---gaaaagaa	gcaatthtgaag...1161...	ctaactataaca	---t-tttttgt	GAATA	TTTGAATGTT	-----	tcctaacagttgtgacgt	---ta...	127...	tgtgcagataca	ggctggtc	
	* **	* * ****	* *	*****	* **** * *			* * *	*** ** *		* ** * *	* ** *	

id=287493 gene=ENSG00000148737 name=TCF7L2 segment=chr10.114926084.114927437.1 type=E3 VIEW

Figure 38:



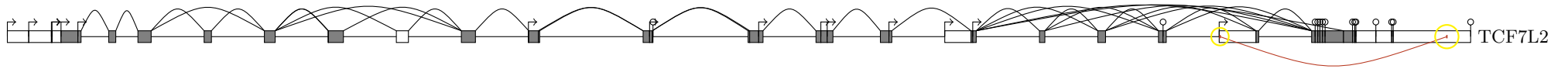
H. Sap	gtaccaca	gtaaggagtcc...1718...	cagcttggggagaggggtctc	TATTGACATAAG	AGAGGTTA	taaaatthaattagccattc...182...	ccttctttgtag	gcaaggtc
R. Mac	gtaccaca	gtaaggagtcc...1680...	cagcttggggagaggggtctc	TATTGACATAAG	AGAGGTTA	taaaatthaattagccattc...182...	ccttctttgcag	gcaaggtc
P. Tro	gtaccaca	gtaaggagtcc...1707...	cagcttggggagaggggtctc	TATTGACATAAG	AGAGGTTA	taaaatthaattagccattc...182...	ccttctttgtag	gcaaggtc
P. Abe	gtaccaca	gtaaggagtcc...1696...	cagcttggggagaggggtctc	TATTGACATAAG	AGAGGTTA	taaaatthaattagccattc...182...	ccttctttgtag	gcaaggtc
C. Jac	gtaccaca	gtaaggagtcc...1666...	cagcttggggagaggggtctc	TATTGACATAAG	AGAGGTTA	taaaatthaattagccattc...182...	ccttctttgtag	gcaaggtc
M. Mus	gtaccaca	gtaagcaattcc...1604...	cagcttggggagaggggtctc	TATTGACATAAG	AGAGGTTA	taaaatthaattagccattc...188...	cctttttgtag	gcaaggtc
R. Nor	gtaccaca	gtaagcagttcc...2139...	cagcttggggagaggggtctc	TATTGACATAAG	caGAGGT	tataaaatthaattagccat--...197...	cctttttgtag	gcaaggtc
C. Por	gtaccaca	gtaaggagtcc...1625...	cagcttggggagaggggtctc	TATTGACATAAG	AGAGGTTA	taaaatthaattagccattc...182...	ccttctttgtag	gcaaggtc
C. Fam	gtaccaca	gtaaggagtcc...1691...	cagcttggggagaggggtctc	TATTGACATAAG	AGAGGTTA	taaaatthaattagccattc...183...	ccttcttcatag	gcaaggtc
F. Cat	gtaccaca	gtaaggagtcc...1993...	cagcttggggagaggggtctc	TATTGACATAAG	AGAGGTTA	taaaatthaattagccattc...181...	ccctctttatag	gcaaggtc
B. Tau	gtaccaca	gtaaggagtcc...1734...	cagcttggggagaggggtctc	TATTGACATAAG	AAAGGTTA	taaaatthaattagccattc...183...	cgctctttgtag	gcaaggcc
E. Cab	gtaccaca	gtaaggagtcc...1689...	cagcttggggagaggggtctc	TATTGACATAAG	AGAGGTTA	taaaatthaattagccattc...183...	ccttctttgtag	gcaaggtc
S. Sus	gtaccaca	gtaaggagtcc...1533...	cagcttggggagaggggtctc	TATTGACATAAG	caAAGGT	tataaaatthaattagccat--...186...	ccttctttgcag	gcagggtc
L. Afr	gtaccaca	gtaaggagtcc...1776...	cagcttggggagaggggtctc	TATTGACATAAG	AGAGGTTA	taaaatthaattagccattc...179...	ccctctttgtag	gcaaggtc
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id=287451 gene=ENSG00000148737 name=TCF7L2 segment=chr10.114903785.114905769.1 type=IN

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R. Mac	ag	gtgagt	tccaagaaccgg...4428...	tatgtatatttcaaccacgt	TAATA	TTTTa	TTTAGc	TGTCAATA	tacaacaaaagatttcacct...367...	cgatttacacag	ctttctgt
P. Tro	ag	gtgagt	tccaagaaccgg...4432...	tatgtatatttcaaccacgt	TAATA	TTTTa	TTTAGc	TGTCAATA	tacaacaaaagatttcacct...363...	cgatttacacag	ctttctgt
P. Abe	ag	gtgagt	tccaagaaccgg...4436...	tatgtatatttcaaccacgt	TAATA	TTTTa	TTTAGc	TGTCAATA	tacaacaaaagatttcacct...374...	cgatttacacag	ctttctgt
C. Jac	ag	gtaagt	tccaagaatcag...4378...	tatgtatatttcaaccacgt	TAATA	TTTTa	TTTAGc	TGTCAATA	tacaacaaaagatttcacct...364...	cgatttacacag	ctttctgt
M. Mus	ag	gtgagt	cgctgtgacttc...4232...	tatgtacatttcaaccacat	TAATA	TTTTa	TTTAGc	TGTCAATA	tacaacaaaagatatttcacct...367...	caatttacacag	ctttctgt
R. Nor	ag	gtgagt	tgcaagtacctc...4502...	---cacacttcaaccattact	ATTTT	TTTAGc	TGTCAATA	tacaacaaaagatttcacct...365...	cgatttacacag	ctttctgt	
C. Por	ag	gtgagt	tcaagaaccagg...4287...	tatgtatatttcaaccacgt	TAATA	TTTTa	TTTAGc	TGTCAATA	tacaacaaaagatttcacct...384...	caatttacacag	ctttctgt
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F. Cat	ag	gtgagt	tccaagaaccgg...4527...	tgtgtatacttggaccacgt	TAATA	TTTTa	TTTAGc	TGTCAATA	tacaacaaaagatttcacct...374...	cgatttacacag	cttcctgt
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S. Sus	ag	gtgagt	tccaagaaccag...4536...	---tacacttcaaccgattcat	ATTTT	TTTAGc	TGTCAATA	tacaacaaaagatttcacct...369...	cgatttacacag	ctttctgt	
L. Afr	ag	gtgagt	tccagaactgga...4457...	tgtatatacttcagccacgt	TAATA	TTTTa	TTTAGc	TGTCAATA	tacaacaaaagatttcacct...444...	cgatttacacag	ctttctgt
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id=287455 gene=ENSG00000148737 name=TCF7L2 segment=chr10.114905863.114910741.1 type=IN VIEW

Figure 40:



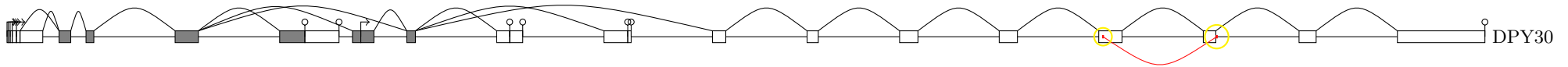
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R.Mac	ccgtgcag	gtatattaccac...499...-----acagaggagcttggttagct	GACAttGT	TTtACAGt
P.Tro	ccgtgcag	gtatattaccac...499...-----acagaggagcttggttagct	GACAttGT	TTTACAGt
P.Abe	ccgtgcag	gtatattaccac...500...-----acagaggagcttggttagct	GACAttGT	TTTACAGt
C.Jac	ccgtgcag	gtatattaccac...502...-----acagaggagcttggttagct	GACAttGT	TTTACAGt
M.Mus	ccctgcag	gtatatgaccat...575...-----taaggaggagctt-gtttagct	GACAttGT	TTTACAGt
R.Nor	ccctgcag	gtacatgaccat...641...-----tgtggaggagctt-gtttagct	GACAttGT	TTTACAGt
C.Por	ccgtgcag	gtatataatcac...482...ctgtctgtgcagaggagctt	GTTAGctGACAttGT	TtACAGa
C.Fam	ccatgcag	gtatattaccgc...493...-----acggaggagcccgggttagct	GACAttGT	TTTACAGt
B.Tau	ccatgcag	gtatatcccta...494...-----acagaggagcttggttagct	GACAttGT	TTTACAGt
E.Cab	ccgtgcag	gtatattaccac...485...-----acagaggagctcggctagct	GACAttGT	TTTACAGt
S.Sus	ccatgcag	gtatattacccta...480...-----acagaggagcttggttagct	GACAttGT	TTTACAGt
O.Avi	ccgtgcag	gtatattcccta...498...-----acagaggagcttggttagct	GACAttGT	TTTACAGt
L.Afr	ccgtgcag	gtatattatcac...481...-----acagaggagcttggttagct	GACAttGT	TTTACAGt
	** ** ** ** *	***** * *****	*****	*****

id=287477 gene=ENSG00000148737 name=TCF7L2 segment=chr10.114920451.114920989.1 type=IN

H.Sap	---aaaaaaaa	gcaatthtgaag...1083...attgtagttgacatgaagcg	ATTGTAAAACtGTGt	tccgatttttctctggttata-----	...193...tgtgcagataaaa	ggctggtc
R.Mac	aaaaaaaaagaa	gcaatthtgaag...1093...attgtagttgacatgaagcg	ATTGTAAAACtGTGt	tccgatttttctctggttata-----	...193...tgtgcagataaaa	ggctggtc
P.Tro	---aaaaaaaa	gcaatthtgaag...1089...attgtagttgacatgaagcg	ATTGTAAAACtGTGt	tccgatttttctctggttata-----	...193...tgtgcagataaaa	ggctggtc
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C.Jac	---aaaaaaaa	gcaatthtgaag...1104...attgtagttgacatgaagcg	ATTGTAAAACtGTGt	tccgatttttctctggttata-----	...193...tgtgcagataaaa	gtctggtc
M.Mus	---agagagaa	gcaatthtgaag...1150...atcgtagttgacatgaagcg	ATTGTAAAACtGTGt	tccgg-ttttctctggtttat-----	...213...tatgtgcagaaa	ggctggcc
R.Nor	---agagagaa	gcaactthtgaag...1109...atcgtagttgacatgaagcg	ATTGTAAAACtGTGt	tccgg-ttttctctggtttat-----	...192...tatgtgcagaaa	ggctggtc
C.Por	---ggagagaa	gcgatthtgaag...1107...-ttgtagttgacatgaagcga	TGTAAAACtGTGt	CTGATTtttctctggtttataaaat	...186...tgtgcagataaaa	ggctggtc
C.Fam	---aagaagaa	gcaatthtgaag...1095...attgtagttgacatgaagcg	ATTGTAAAACtGTGt	tccaatthtctctggttata-----	...193...tgtgcagataaaa	ggctggcc
B.Tau	---aaaaagaa	gcaatthtgaag...1098...attgtagttgacatgaagcg	ATTGTAAAACtGTGt	tccggttttctctggttata-----	...194...tgtgcagataaaa	ggctggtc
E.Cab	---aaaaaaaa	gcaatthtgaag...1104...attgtagttgacatgaagcg	ATTGTAAAACtGTGt	tccgatttttctctggttata-----	...193...tgtgcagataaaa	ggctggtt
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O.Avi	---aaaaaaaa	gcaatthtgaag...1108...attgtagttgacatgaagcg	ATTGTAAAACtGTGt	tccggttttctctggttata-----	...194...tgtgcagataaaa	ggctggtc
L.Afr	---gaaaagaa	gcaatthtgaag...1099...attgtagttgacatgaagcg	ATTGTAAAACtGTGt	tccaatthtctctggttata-----	...191...tgtgcagataaaa	ggctggtc
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Figure 42: CS=6.72



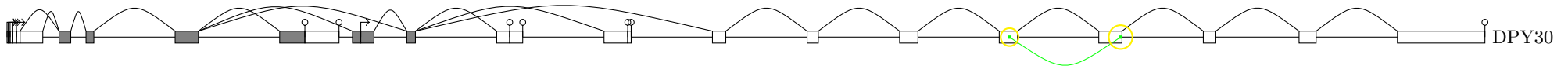
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R.Mac	tctttaag	ccataaggatga	GTTTACCATTATT	cctgtactggttgagctct...86...tctgccattggg	gtaagttc
P.Tro	tctttaag	ccataaggatga	GTTTACCATTATT	cctgtactggttgagctct...86...tctgccattggg	gtaagttc
P.Abe	tctttaag	ccataaggatga	GTTTACCATTATT	cctgtactggttgagctct...86...tctgccattggg	gtaagttc
C.Jac	tctttaag	ccataaggatga	GTTTACCATTATT	cctgtactggttgagctct...86...tctgccattggg	gtaagttc
M.Mus	tctttaag	ccataaagatga	GTTTACCATTATT	cctgtactggttgagctct...86...tctgccattggg	gtaagttc
R.Nor	tctttaag	ccataaagatga	GTTTACCATTATT	cctgtactggttgagctct...86...tctgccattggg	gtaagttc
C.Por	tctttaag	ccataaggatga	GTTTACCATTATT	cctgtactggttgagctct...86...tctgccattggg	gtaagttc
O.Cun	tctttaag	ccataaggatga	GTTTACCATTATT	cctgtactggttgagctct...86...tctgccattggg	gtaagttc
C.Fam	tctttaag	ccataaggatga	GTTTACCATTATT	cctgtactggttgagctct...86...tctgccattggg	gtaagttc
F.Cat	tctttaag	ccataaggatga	GTTTACCATTATT	cctgtactggttgagctct...86...tctgccattggg	gtaagttc
E.Cab	tctttaag	ccataaggatga	GTTTACCATTATT	cctgtactggttgagctct...86...tctgccattggg	gtaagttc
S.Sus	tctttaag	ccataaggatga	GTTTACCATTATT	cctgtattggttgagctct...86...tctgccattggg	gtaagttt
L.Afr	tctttaag	ccataaggatga	GTTTACCATTATT	cctgtactggttgagctct...86...tctgccattggg	gtaagttc
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id=58617 gene=ENSG00000162961 name=DPY30 segment=chr2_32117061_32117203_-1 type=E3

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P.Tro	gtttcaag	gtcaaaggttcc...36...atagatccattgaacatcta	GATAAaaTG	GTAAGTct
P.Abe	gtttcaag	gtcaaaggttcc...36...atagatccattgaacatcta	GATAAaaTG	GTAAGTct
C.Jac	gtttcaag	gtcaaaggttcc...36...atagatccattgaacatcta	GATAAaaTG	GTAAGTct
M.Mus	gtttcaag	gtcaaaggttcc...36...atagatccattgaacatcta	GATAAaaTG	GTAAGTct
R.Nor	gtttcaag	gtcaaaggttcc...36...atagatccattgaacatcta	GATAAaaTG	GTAAGTct
C.Por	gtttcaag	gtcaaaggttcc...36...atagatccattgaacatcta	GATAAaaTG	GTAAGTct
O.Cun	gtttcaag	gtcagagggttcc...36...atagatccattgaacatcta	GATAAaaTG	GTAAGTct
C.Fam	gtttcaag	gtcaaaggttcc...36...atagatccattgaacatcta	GATAAaaTG	GTAAGTct
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E.Cab	gtttcaag	gtcaaaggttcc...36...atagatccattgaacatcta	GATAAaaTG	GTAAGTct
S.Sus	gtttcaag	gtcaaaggttcc...36...atagatccattgaacatcta	GATAAaaTG	GTAAGTcc
L.Afr	gtttcaag	gtcaaaggttcc...36...atagatccattgaacatcta	GATAAaaTG	GTAAGTct
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Figure 43:



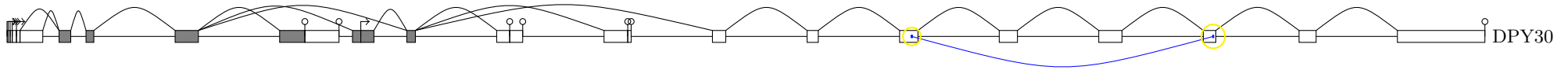
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P. Tro	ctcttttag	tttacggagaactatggaagacaggaatg	tttgaacgcatgtctct	GCAGac	AGATGAAGat	GAACACAG	tattgaaatgcatttgccttatacagctaaagccatggaag	gtatattg
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C. Jac	ctcttttag	tttatggagaactatggaagacaggaatg	tttgaacgcatgtctct	GCAGac	AGATGAAGat	GAACACAG	tattgaaatgcatttgccttatacagctaaagccatggaag	gtatattg
M. Mus	ctcttttag	tttacggagagctatggaagacaggaatg	tttgaacgcatgtctct	GCAGac	AGATGAAGat	GAACACAG	tattgaaatgcatttgccttatacagctaaagccatggaag	gtatattg
R. Nor	ctcttttag	tttacggagagctatggaagacaggaatg	tttgaacgcatgtctct	GCAGac	AGATGAAGat	GAACACAG	tattgaaatgcatttgccttatacagctaaagccatggaag	gtacactg
C. Por	atcttttag	tttatggagagctatggaagacaggaatg	tttgaacgcatgtctct	GCAGac	AGATGAAGat	GAACACAG	tattgaaatgcatttgccttatacagctaaagccatggaag	gtatgttg
O. Cun	ctcttttag	tttacggagaactgtggaagacaggaatg	tttgaacgcatgtctct	GCAGac	AGATGAAGat	GAACACAG	tattgaaatgcatttgccttatacagctaaagccatggaag	gtatattg
C. Fam	ctcttttag	tttacggagaactatggaagacaggaatg	tttgaacgcatgtctct	GCAGac	AGATGAAGat	GAACACAG	tattgaaatgcatttgccttatacagctaaagccatggaag	gtatattg
F. Cat	ctcttttag	tttacggagaactatggaagacaggaatg	tttgaacgcatgtctct	GCAGac	AGATGAAGat	GAACACAG	tattgaaatgcatttgccttatacagctaaagccatggaag	gtatactg
B. Tau	acctcttag	tttacggagaactatggaagacaggaatg	tttgaacgcatgtctct	GCAGac	AGATGAAGat	GAACACAG	tattgaaatgcatttgccttatacagctaaagccatggaag	gtatacta
E. Cab	ctcttttag	tttacggagaactatggaagacaggaatg	tttgaacgcatgtctct	GCAGac	AGATGAAGat	GAACACAG	tattgaaatgcatttgccttatacagctaaagccatggaag	gtatattg
S. Sus	atctcttag	tttacggagaactatggaagacaggaatg	tttgaacgcatgtctct	GCAGac	AGATGAAGat	GAACACAG	tattgaaatgcatttgccttatacagctaaagccatggaag	gtatatta
L. Afr	atctcttag	tttacggagaactatggaagacaggaatg	tttgaacgcatgtctct	GCAGac	AGATGAAGat	GAACACAG	tattgaaatgcatttgccttatacagctaaagccatggaag	gtatattg
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R. Mac	tctttaag	ccataaggatga..81...	agcggatcctagtaatctct	TTGTg	GTTTCTTC	tg	ATTCTGC	cactggg	gtaagttc
P. Tro	tctttaag	ccataaggatga..81...	agcggatcctagtaatctct	TTGTg	GTTTCTTC	tg	ATTCTGC	cattggg	gtaagttc
P. Abe	tctttaag	ccataaggatga..81...	agcggatcctagtaatctct	TTGTg	GTTTCTTC	tg	ATTCTGC	cattggg	gtaagttc
C. Jac	tctttaag	ccataaggatga..81...	agcggatcctagtaatctat	TTGTg	GTTTCTTC	tg	ATTCTGC	cattggg	gtaagttc
M. Mus	tctttaag	ccataaagatga..81...	agcggatcctagtaatctct	TTGTg	GTTTCTTC	tg	ATTCTGC	cactggg	gtaagttc
R. Nor	tctttaag	ccataaagatga..81...	agcggatcctagtaatctct	TTGTg	GTTTCTTC	tg	ATTCTGC	cattggg	gtaagttc
C. Por	tctttaag	ccataaggatga..81...	agcggatcctagtaatctct	TTGTg	GTTTCTTC	tg	ATTCTGC	cattggg	gtaagttc
O. Cun	tctttaag	ccataaggatga..81...	agcggatcctagtaatctct	TTGTg	GTTTCTTC	tg	ATTCTGC	cattggg	gtaagttc
C. Fam	tctttaag	ccataaggatga..81...	agcggatcctagtaatctct	TTGTg	GTTTCTTC	tg	ATTCTGC	cattggg	gtaagttc
F. Cat	tctttaag	ccataaggatga..81...	agcggatcctagtaatctct	TTGTg	GTTTCTTC	tg	ATTCTGC	cattggg	gtaagttc
B. Tau	tctttaag	ccataaggatga..81...	agcggagcctagcaatctct	TTGTg	GTTTCTTC	tg	ATTCTGC	cattggg	gtaagttc
E. Cab	tctttaag	ccataaggatga..81...	agcggatcctagtaatctct	TTGTg	GTTTCTTC	tg	ATTCTGC	cattggg	gtaagttc
S. Sus	tctttaag	ccataaggatga..81...	agcggatcctagtaatctct	TTGTg	GTTTCTTC	tg	ATTCTGC	cattggg	gtaagttt
L. Afr	tctttaag	ccataaggatga..81...	agcggatcctagtaatctct	TTGTg	GTTTCTTC	tg	ATTCTGC	cattggg	gtaagttc
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Figure 44:



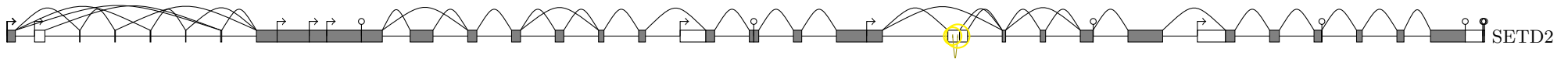
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F. Cat	tctcctag	ccggagaat	ttt...28...	ctctctcgatgtgcactttc	CAGTgtGGATaTATA	taggacac	cctctg	tatgac	cttcgt	tattgac	aaaaga	gtaagt
E. Cab	tctcctag	ccggagaat	ttt...28...	ctctctcgatgtgcactttc	CAGTgtGGATaTATA	taggacac	cctctg	tatgac	cttcgt	tattgac	aaaaga	gtaagt
S. Sus	tctcctag	ccggagaat	ttt...28...	ctttctcgatgtgcactttc	CAGTgtGGATaTATA	taggacac	cctctg	tatgac	cttcgt	tattgac	aaaaga	gtaagt
L. Afr	tctcctag	ccggagaat	ttt...28...	ctctctcgatgtgcactttc	CAGTgtGGATaTATA	tagaactc	cctctg	tatgac	cttcgt	tattgac	aaaaa	gtaagt
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R. Mac	gtttcaag	gtcaaag	gttcg	tacag	tactat	gatgat	atccag	ggggag	attTATAgATCCATTG	aacat	ctagata	aaaatg	gtaagt
P. Tro	gtttcaag	gtcaaag	gttcg	tacag	tactat	gatgat	atccag	ggggag	attTATAgATCCATTG	aacat	ctagata	aaaatg	gtaagt
P. Abe	gtttcaag	gtcaaag	gttcg	tacag	tactat	gatgat	atccag	ggggag	attTATAgATCCATTG	aacat	ctagata	aaaatg	gtaagt
C. Jac	gtttcaag	gtcaaag	gttcg	tacag	tactat	gatgat	atccag	ggggag	attTATAgATCCATTG	aacat	ctagata	aaaatg	gtaagt
M. Mus	gtttcaag	gtcaaag	gttcg	tacag	tactat	gatgat	atccag	ggggag	attTATAgATCCATTG	aacat	ctagata	aaaatg	gtaagt
R. Nor	gtttcaag	gtcaaag	gttcg	tacag	tactat	gatgat	atccag	ggggag	attTATAgATCCATTG	aacat	ctagata	aaaatg	gtaagt
C. Por	gtttcaag	gtcaaag	gttcg	tacag	tactat	gatgat	atccag	ggggag	attTATAgATCCATTG	aacat	ctagata	aaaatg	gtaagt
O. Cun	gtttcaag	gtcaaag	gttcg	tacag	tactat	gatgat	atccag	ggggag	attTATAgATCCATTG	aacat	ctagata	aaaatg	gtaagt
C. Fam	gtttcaag	gtcaaag	gttcg	tacag	tactat	gatgat	atccag	ggggag	attTATAgATCCATTG	aacat	ctagata	aaaatg	gtaagt
F. Cat	gtttcaag	gtcaaag	gttcg	tacag	tactat	gatgat	atccag	ggggag	attTATAgATCCATTG	aacat	ctagata	aaaatg	gtaagt
E. Cab	gtttcaag	gtcaaag	gttcg	tacag	tactat	gatgat	atccag	ggggag	attTATAgATCCATTG	aacat	ctagata	aaaatg	gtaagt
S. Sus	gtttcaag	gtcaaag	gttcg	tacag	tactat	gatgat	atccag	ggggag	attTATAgATCCATTG	aacat	ctagata	aaaatg	gtaagt
L. Afr	gtttcaag	gtcaaag	gttcg	tacag	tactat	gatgat	atccag	ggggag	attTATAgATCCATTG	aacat	ctagata	aaaatg	gtaagt
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Figure 45:



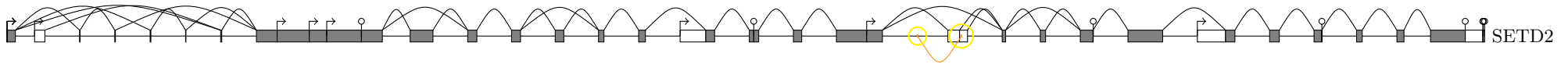
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R. Mac	ccatctag	cttctcagggca...92...gtgcattctgtgaagaaca	GGAAGATGGTTGGGAAG	ttggatgatgcatgaaaaatataatag	gtgaaaag
P. Tro	ccatctag	cttctcagggca...92...gtgcattctgtgaagaaca	GGAAGATGGTTGGGAAG	ttggatgatgcatgaaaaatataatag	gtgaaaag
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C. Jac	ccatctag	cttctcagggca...92...gtgcattctgtgaagaaca	GGAAGATGGTTGGGAAG	ttggatgatgcatgaaaaatataatag	gtgaaaag
M. Mus	ccatctag	cttctcagggca...92...gtgcattctgtgaagaaca	GGAAGATGGTTGGGAAG	ttggatgatgcatgaaaaatataatag	gtgaaaag
R. Nor	ccatctag	cttctcagggca...92...gtgcattctgtgaagaaca	GGAAGATGGTTGGGAAG	ttggatgatgcatgaaaaatataatag	gtgaaaag
C. Por	ccatctag	cttctcagggca...92...gtgcattctgtgaagaaca	GGAAGATGGTTGGGAAG	ttggatgatgcatgaaaaatataatag	gtgaaaag
O. Cun	ccatctag	cttctcagggca...92...gtgcattctgtgaagaaca	GGAAGATGGTTGGGAAG	ttggatgatgcatgaaaaatataatag	gtgaaaag
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B. Tau	ccatccag	cttctcagggca...92...gtgcattctgtgaagaaca	GGAAGATGGTTGGGAAG	ttggatgatgcatgaaaaataaatag	gtgaaaag
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S. Sus	ccatctag	cttctcagggca...93...-tgcattctgtgaagaacag	GAAGATGGTTGGGAAG	ttggatgatgcatgaaaaatataatag	gtgaaaag
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Figure 48:



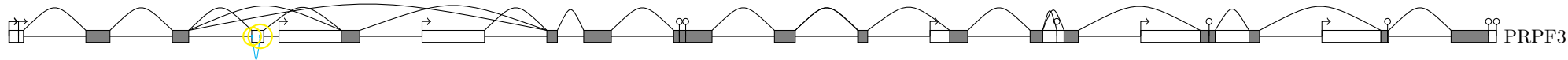
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P. Tro	tataatag	gtgaaaaga	GGACAGAGGTGGTAACTC	actggcgcggcggtatattt...55...agaaaggattaa	gtgagcta
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C. Jac	tataatag	gtgaaaaga	GGACAGAGGTGGTAACTC	actggcgcggcggtatattt...55...agaaaggattaa	gtgagcta
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R. Nor	tataatag	gtgaaaaga	GGACAGAGGTGGTAACTC	actggcgcggcggtatattt...55...agaaaggattaa	gtgagcta
C. Por	tataatag	gtgaaaaga	GGACAGAGGTGGTAACTC	actggcgcggcggtatattt...55...agaaaggattaa	gtgagcta
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C. Fam	tataatag	gtgaaaaga	GGACAGAGGTGGTAACTC	actggcgcggcggtatattt...55...agaaaggattaa	gtgagcta
B. Tau	taaaatag	gtgaaaaga	GGACAGAGGTGGTAACTC	actggcgcggcggtatattt...55...agaaaggattaa	gtgagcta
E. Cab	tataatag	gtgaaaaga	GGACAGAGGTGGTAACTC	actggcgcggcggtatattt...55...agaaaggattaa	gtgagcta
S. Sus	tataatag	gtgaaaaga	GGACAGAGGTGGTAACTC	actggcgcggcggtatattt...55...agaaaggattaa	gtgagcta
L. Afr	tatgatag	gtgaaaaga	GGACAGAGGTGGTAACTC	actggcgcggcggtatattt...55...agaaaggattaa	gtgagcta
	*	****	*****	*****	*****

id=567638 gene=ENSG00000181555 name=SETD2 segment=chr3_47122291_47122405_-1 type=AN VIEW

Figure 49: CS=4.2



H. Sap	agctaaag	gtaggttacaat...1631...tattatgggagagtcctttt	TCTTgaACTGTAG	GAGTTCca
R. Mac	agctaaag	gtaggttacaat...1619...tattatgggagagtcctttt	TCTTgaACTGTAG	GAGTTCca
P. Tro	agctaaag	gtaggttacaat...1634...tattatgggagagtcctttt	TCTTgaACTGTAG	GAGTTCca
P. Abe	agctaaag	gtaggttataat...1616...tattatgggagagtcctttt	TCTTgaACTGTAG	GAGTTCca
C. Jac	agctaaag	gtaggttacaat...1885...tattatgggagagtcctttt	TCTTgaACTGTAG	GAGTTCca
M. Mus	agttaaag	gtaggttatggt...1727...tattatgggagagtcctttt	TCTTgaACTGTAG	GAGTTCca
R. Nor	agttaaag	gtaggttatggt...1846...tattatgggagagtcctttt	TCTTgaACTGTAG	GAGTTCca
C. Por	agctaaag	gtaggttttggg...1197...tattatgggagagtcctttt	TCTTgaACTGTAG	GAGTTCca
O. Cun	aactaaag	gtaggttacaat...1496...tattatgggagagtcctttt	TCTTgaACTGTAG	GAGTTCca
C. Fam	agctaaag	gtaggttacagt...1217...tattatgggagagtcctttt	TCTTgaACTGTAG	GAGTTCca
F. Cat	agctaaag	gtaggttacagt...1211...tattatgggagagtcctttt	TCTTgaACTGTAG	GAGTTCca
B. Tau	agctaaag	gtaggttacagt...1169...tattatgggagagtcctttt	TCTTgaACTGTAG	GAGTTCca
E. Cab	agctaaag	gtaggtttgcag...1232...tattatgggagagtcctttt	TCTTgaACTGTAG	GAGTTCca
O. Avi	agctaaag	gtaggttatggt...1182...tattatgggagagtcctttt	TCTTgaACTGTAG	GAGTTCca
L. Afr	agctaaag	gtaggttacagt...1258...tattatgggagagtcctttt	TCTTgaACTGTAG	GAGTTCca
*	*****	*****	*****	*****

id=692891 gene=ENSG00000117360 name=PRPF3 segment=chr1_150298340.150300015.1 type=IN

H. Sap	aactgtag	gagttccaggaagcgctcgccccctggccgaggatgatgccttgcaaaacac	GAGCCCTCCTAGTgAAGA	ggggatgtcacc	caagcctaccaccg	gtgtgtac
R. Mac	aactgtag	gagttccaggaagcgctcgccccctggccgaggatgatgccttgcaaaacac	GAGCCCTCCTAGTgAAGA	ggggatgtcacc	caagcctaccaccg	gtgtgtac
P. Tro	aactgtag	gagttccaggaagcgctcgccccctggccgaggatgatgccttgcaaaacac	GAGCCCTCCTAGTgAAGA	ggggatgtcacc	caagcctaccaccg	gtgtgtac
P. Abe	aactgtag	gagttccaggaagcgctcgccccctggccgaggatgatgccttgcaaaacac	GAGCCCTCCTAGTgAAGA	ggggatgtcacc	caagcctaccaccg	gtgtgtac
C. Jac	aactgtag	gagttccaggaagcgctcgccccctggctgaggatgatgccttgcaaaacac	GAGCCCTCCTAGTgAAGA	ggggatgtcacc	caagcctaccaccg	gtgtgtac
M. Mus	aactgtag	gagttccaggaagcgctcgccccctggctgaggatgatgccttgcaaaacac	GAGCCCTCCTAGTgAAGA	ggggatgtcacc	caagcctaccaccg	gtgtgtac
R. Nor	aactgtag	gagttccaggaagcgctcgccccctggctgaggatgatgccttgcaaaacac	GAGCCCTCCTAGTgAAGA	ggggatgtcacc	caagcctaccaccg	gtgtgtac
C. Por	aactgtag	gagttccaggaagcgctcgccccctggccgaggatgatgccttgcaaaacac	GAGCCCTCCTAGTgAAGA	ggggatgtcacc	caagcctaccaccg	gtgtgtac
O. Cun	aactgtag	gagttccaggaagcgctcgccccctggccgaggatgatgccttgcaaaacac	GAGCCCTCCTAGTgAAGA	ggggatgtcacc	caagcctaccaccg	gtgtgtac
C. Fam	aactgtag	gagttccaggaagcgctcgccccctggccgaggatgatgccttgcaaaacac	GAGCCCTCCTAGTgAAGA	ggggatgtcacc	caagcctaccaccg	gtgtgtac
F. Cat	aactgtag	gagttccaggaagcgctcgccccctggccgaggatgatgccttgcaaaacac	GAGCCCTCCTAGTgAAGA	ggggatgtcacc	caagcctaccaccg	gtgtgtac
B. Tau	aactgtag	gagttccaggaagcgctcgccccctggccgaggatgatgccttgcaaaacac	GAGCCCTCCTAGTgAAGA	ggggatgtcacc	caagcctaccaccg	gtgtgtac
E. Cab	aactgtag	gagttccaggaagcgctcgccccctggccgaggatgatgccttgcaaaacac	GAGCCCTCCTAGTgAAGA	ggggatgtcacc	caagcctaccaccg	gtgtgtac
O. Avi	aactgtag	gagttccaggaagcgctcgccccctggccgaggatgatgccttgcaaaacac	GAGCCCTCCTAGTgAAGA	ggggatgtcacc	caagcctaccaccg	gtgtgtac
L. Afr	aactgtag	gagttccaggaagcgctcgccccctggctgaggatgatgccttgcaaaacac	GAGCCCTCCTAGTgAAGA	ggggatgtcacc	caagcctaccaccg	gtgtgtac
*****	*****	*****	*****	*****	*****	*****

id=692892 gene=ENSG00000117360 name=PRPF3 segment=chr1_150300016.150300111.1 type=AN VIEW

Figure 50: CS=9



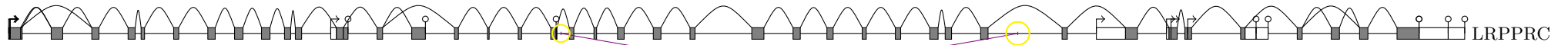
H. Sap	aCTGGCta	AGTTtTAATTGcTTCCaATGAgGTCAGCAaaGGTA	tttatcgaaaagccctgaat-...196...gcaacaaaacaa	gtaagtta
R. Mac	aCTGGCta	AGTTtTAATTGcTTCCaATGAgGTCAGCAaaGGTA	tttatcgaaaagccctgaat-...205...tcaacaaaacaa	gtaagtga
P. Tro	aCTGGCta	AGTTtTAATTGcTTCCaATGAgGTCAGCAaaGGTA	tttatcgaaaagccctgaat-...196...tcaacaaaacaa	gtaagtta
P. Abe	aCTGGCta	AGTTtTAATTGcTTCCaATGAgGTCAGCAaaGGTA	tttatcgaaaagccctgaat-...198...tcaacaaaacaa	gtaagtta
C. Jac	aCTGGCta	AGTTtTAATTGcTTCCaATGAgGTCAGCAaaGGTA	tttatcgaaaagccctgaat-...235...tcaacaaaacaa	gtaagtca
M. Mus	aCTGGTta	AGTTtTAATTGcTTCCaATGAgGTCAGCAaaGGTA	tttatcgaaaagccctgaat-...193...caaacagaacaa	gtaagtta
R. Nor	actgggta	agcttTAATTGcTTCCaATGAgGTCAGCAaaGGTA	tttatcgaaaagccctgaat-...191...caaacagaacaa	gtaagtta
C. Por	aCTGGTta	AGTTtTAATTGcTTCCaATGAgGTCAGCAaaGGTA	tttatcgaaaagccctgaat-...224...taaacagaacaa	gtaagtta
O. Cun	aCTGGTta	AGTTtTAATTGcTTCCaATGAgGTCAGCAaaGGTA	tttatcgaaaagccctgaat-...200...taaacagaacaa	gtaagtta
C. Fam	aCTGGTta	AGTTtTAATTGcTTCCaATGAgGTCAGCAaaGGTA	tttatcgaaaagccctgaat-...198...tcaacagaacaa	gtaagtta
F. Cat	aCTGGTta	AGTTtTAATTGcTTCCaATGAgGTCAGCAaaGGTA	tttatcgaaaagccctgaat-...198...tcaacagaacaa	gtaagtta
B. Tau	aCTGGTta	AGTTtTAATTGcTTCCaATGAgGTCAGCAaaGGTA	tttatcgaaaagccctgaat-...201...tcaacagaacaa	gtaagtga
E. Cab	aCTGGTta	AGTTtTAATTGcTTCCaATGAgGTCAGCAaaGGTA	tttatcgaaaagccctgaat-...199...tcaacagaacaa	gtaagtta
S. Sus	aCTGGTta	AGTTtTAATTGcTTCCaATGAgGTCAGCAaaGGTA	tttatcgaaaagccctgaat-...199...tcaacagaacaa	gtaagtgg
L. Afr	actggta	agtttTAATTGTTCCaATGAgGTCAGCAaaGGTA	tttatcgaaaagccctgaat-...207...tcaacagaacaa	gtaagtta
	**** *	** ***** ***** ***** ***** *	**** *****	*****

id=669326 gene=ENSG00000140285 name=FGF7 segment=chr15_49715375_49715637_1 type=E5

H. Sap	actgggta	agttttaattgc...82...-acacagagagaaaatccttcTGC--CTGTTGATTATGGAAaCAATTA	GATTctGCTGgaacttttcagctgagaaa---...79...gcaacaaaacaa	gtaagtta
R. Mac	actgggta	agttttaattgc...89...-----gagagaaaatccttcctgccc--GTTGATTATGGAAaCAATTA	GATTctGCTGgaacttttcagctgagaaa---...79...tcaacaaaacaa	gtaagtga
P. Tro	actgggta	agttttaattgc...82...-acacagagagaaaatccttcTGC--CTGTTGATTATGGAAaCAATTA	GATTctGCTGgaacttttcagctgagaaa---...79...tcaacaaaacaa	gtaagtta
P. Abe	actgggta	agttttaattgc...84...-acacagagagaaaatccttcTGC--CTGTTGATTATGGAAaCAATTA	GATTctGCTGgaacttttcagctgagaaa---...79...tcaacaaaacaa	gtaagtta
C. Jac	actgggta	agttttaattgc...119...-----agagaaaatccttcctgccc--TTGATTATGGAAaCAATTA	GATTctGCTGgaacttttcagctgagaaa---...79...tcaacaaaacaa	gtaagtca
M. Mus	actgggta	agttttaattgc...79...-acacacggagaaaatcctttTGC--CTGTTGATTATGGAAaCAATTA	GATTctGCTGgggatttctcagctgagaaa---...79...caaacagaacaa	gtaagtta
R. Nor	actgggta	agctttaattgc...79...-acacacggagaaaatcctttTGC--CTGTTGATTATGGAAaCAATTA	-----tga---ttctgctggaggacttc...89...caaacagaacaa	gtaagtta
C. Por	actgggta	agttttaattgc...111...-acacagagagaaaatccttcTGC--CTGTTGATTATGGAAaCAATTA	GATTctGCTGgaatttctcagctgagaaa---...78...taaacagaacaa	gtaagtta
O. Cun	actgggta	agttttaattgc...86...-acacagaagaaaatccttcTGC--CTGTTGATTATGGAAaCAATTA	GATTctGCTGgaatttctcagctgagaaa---...79...taaacagaacaa	gtaagtta
C. Fam	actgggta	agttttaattgc...84...-acacagagagaaaatccttcTGC--CTGTTGATTATGGAAaCAATTA	GATTctGCTGgaatttctcagctgagaaa---...79...tcaacagaacaa	gtaagtta
F. Cat	actgggta	agttttaattgc...84...-acacagagagaaaatccttcTGC--CTGTTGATTATGGAAaCAATTA	GATTctGCTGgaatttctcagtaagaaa---...79...tcaacagaacaa	gtaagtta
B. Tau	actgggta	agttttaattgc...84...cacacacagagaaaatccttcGTGCTTgcTGTTGATTATGGAAaCAATTA	GATTccGCTGgaatttctcagctgagaaa---...79...tcaacagaacaa	gtaagtga
E. Cab	actgggta	agttttaattgc...85...-acacacagagaaaatccttcTGC--CTGTTGATTATGGAAaCAATTA	GATTctGCTGgaatttctcagctgagaaa---...79...tcaacagaacaa	gtaagtta
S. Sus	actgggta	agttttaattgc...85...-acacacagagaaaatccttcTGC--CTGTTGATTATGGAAaCAATTA	GATTctGCTGgaatttctcagctgagaaa---...79...tcaacagaacaa	gtaagtgg
L. Afr	actgggta	agttttaattgt...93...-acacacagagaaaatccttcTGC--CTGTTGATTATGGAAaCAATTA	-----tga---tctgctggagactttc...91...tcaacagaacaa	gtaagtta
	**** *	** ***** ***** ***** ***** *	* * **	**** *****

id=669326 gene=ENSG00000140285 name=FGF7 segment=chr15_49715375_49715637_1 type=E5 VIEW

Figure 51:



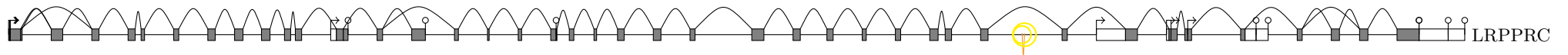
H. Sap	agaagatg	gtaccatttcgTTTTTgctatataatgcctgtcctgcctgacatgatctc	TTAGATTGAA	TGCTG	cttttaagtacaaccagacc...110...cccttctcacag	aatgtaaa
R. Mac	aggagatg	gtaccatttcattTTTTgctatataatgcctgtcctgcctgacatgatctc	TTAGATTGAA	TGCTG	cttttaagtacaaccagacc...110...cccttctcacag	aatgtaaa
P. Tro	agaagatg	gtaccatttcgTTTTTgctatataatgcctgtcctgcctgacatgatctc	TTAGATTGAA	TGCTG	cttttaagtacaaccagacc...110...cccttctcacag	aatgtaaa
P. Abe	agaagatg	gtaccatttcattTTTTgctatataatgcctgtcctgcctgacatgatctc	TTAGATTGAA	TGCTG	cttttaagtacaaccagacc...111...ctcttctcacag	aatgtaaa
C. Jac	aggagatg	gtaccatttcattTTTTgctatataatgcctgtcctgcctgacatgatctc	TTAGATTGAA	TGCTG	cttttaagtacaaccagacc...116...cccttctcacag	aatttaaa
C. Por	aggagatg	gtaccatttcattTTTTgctatataatgcctgtcctgcctgacatgatctc	TTAGATTGAA	TGCTG	cttttaagtacaaccagacc...109...ctcttctcacag	aatataaa
O. Cun	aggagatg	gtaccatttcattTTTTgctatataatgcctgtcctgcctgacatgatctc	TTAGATTGAA	TGCTG	cttttaagtacaaccagacc...113...ctcttctcacag	aatgtaa
C. Fam	aggagatg	gtaccatttcattTTTTgctatataatgcctgtcctgcctgacatgatctc	TTAGATTGAA	TGCTG	cttttaagtacaaccagacc...115...cccttctcacag	aatgtaa
F. Cat	aggagatg	gtaccatttcattTTTTgctatataatgcctgtcctgcctgacatgatctc	TTAGATTGAA	TGCTG	cttttaagtacaaccagacc...118...cccttctcacag	aatgtaa
B. Tau	aggagatg	gtaccatttcattTTTTgctatataatgcctgtcctgcctgacatgatctc	TTAGATTGAA	TGCTG	cttttaagtacaaccagacc...119...cccttctcacag	aatgtaa
S. Sus	aggagatg	gtaccatttcattTTTTgctatataatgcctgtcctgcctgacatgatctc	TTAGATTGAA	TGCTG	cttttaagtacaaccagacc...120...cccttctcacag	aatgtaa
O. Avi	aggagatg	gtaccatttcattTTTTgctatataatgcctgtcctgcctgacatgatctc	TTAGATTGAA	TGCTG	cttttaagtacaaccagacc...118...cccttctcacag	aatgtaa
L. Afr	agaagatg	gtaccgtttcattTTTTgctatagaaatgcctgtcctgcctgacatgatctc	TTAGATTGAA	TGCTG	cttttaagtacaaccagacc...108...ctcttctcacag	aacataac
	** *****	***** **	*****	*****	*****	** * *

id=663415 gene=ENSG00000138095 name=LRPPRC segment=chr2.44175339.44175550_-1 type=IN

H. Sap	aaagcatt	gtaagtgttagt...4679...-atTTtagtcatctaataatgt	CAGCATTCAA	ATCTGA	accgattgtttaaaaaaat...228...tgcttcttttag	cgcgaga
R. Mac	aaagcatt	gtaagtattagt...4679...-atTTtagtcatctaataatgt	CAGCATTCAA	ATCTGA	accgattgtttaaaaaaat...228...tgcttcttttag	cgcgaga
P. Tro	aaagcatt	gtaagtgttagt...4679...-atTTtagtcatctaataatgt	CAGCATTCAA	ATCTGA	accgattgtttaaaaaaat...228...tgcttcttttag	cgcgaga
P. Abe	aaagcatt	gtaagtgttagt...4679...-atTTtagtcatctaataatgt	CAGCATTCAA	ATCTGA	accgattgtttaaaaaaat...228...tgcttcttttag	cgcgaga
C. Jac	aaaaagtt	gtaagtattagt...4679...-atTTtagtcatctaataatgt	CAGCATTCAA	ATCTGA	accgattgtttaaaaaaat...228...tgcttcttttag	cgcgaga
C. Por	aaaaatgc	gtaagtgtctggc...4679...-atTTtagtcatctaataatgt	CAGCATTCAA	ATCTGA	accgattgtttaaaaaaat...228...tgcttcttttag	cgctgaga
O. Cun	aaagatTT	gtaagtattact...4679...-atTTtagtcatctaataatgt	CAGCATTCAA	ATCTGA	accgattgtttaaaaaaat...228...tgcttcttttag	cgctgaga
C. Fam	aaagaatt	gtgagtattggg...4679...tatttta-tcatctaataatgt	CAGCATTCAA	ATCTGA	accgattgtttaaaaaaat...228...tgcttcttttag	cgctgaga
F. Cat	aaagatgt	gtaagtattagt...4679...-atTTtagtcatctaataatgt	CAGCATTCAA	ATCTGA	accgattgtttaaaaaaat...228...tgcttcttttag	cgctgaga
B. Tau	aaagatTT	gtaagtattagt...4679...-atTTtagtcatctaataatgt	CAGCATTCAA	ATCTGA	accgattgtttaaaaaaat...228...tgcttcttttag	cgctgaga
S. Sus	aaagatTT	gtaagtattagt...4679...-atTTtagtcatctaataatgt	CAGCATTCAA	ATCTGA	accgattgtttaaaaaaat...228...tgcttcttttag	cgctgaga
O. Avi	aaagatTT	gtaagtattagt...4678...-atTTtagtcatctaataatgt	CAGCATTCAA	ATCTGA	accgattgtttaaaaaaat...229...tgcttcttttag	cgctgaga
L. Afr	aaacagc	gtaagtactgta...4680...-atTTtagtcatcgaatgt	CAGCATTCAA	ATCTGA	accgattgtttaaaaaaatc...227...tgcttcttttag	cgctgaga
	** **	** **	*****	*****	*****	** **

id=663441 gene=ENSG00000138095 name=LRPPRC segment=chr2.44132920.44139570_-1 type=IN VIEW

Figure 52:



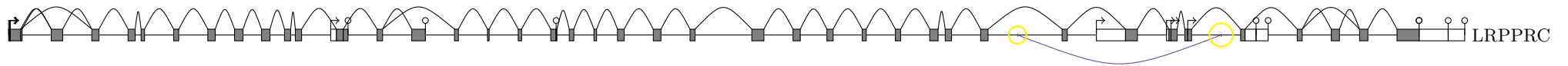
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R.Mac	aaagcatt	gtaagtattagt...4753...ttgttgctcatttccaact	TTGTCat	CTGTCag	AATGcaaaaaaaattatccttct...154...tgcttcttttag	cgcggaga
P.Tro	aaagcatt	gtaagtgttagt...4753...ttgttgctcatttccaact	TTGTCat	CTGTCag	AATGcaaaaaaaattatccttct...154...tgcttcttttag	cgcggaga
P.Abe	aaagcatt	gtaagtgttagt...4753...ttgttgctcatttccaact	TTGTCat	CTGTCag	AATGcaaaaaaaattatccttct...154...tgcttcttttag	cgcggaga
C.Jac	aaaaagt	gtaagtattagt...4753...ttgttgctcatttccaact	TTGTCat	CTGTCag	AATGcaaaaaaaattatccttct...154...tgcttcttttag	cgcggaga
C.Por	aaaaatgc	gtaagtgtctggc...4753...ttgttgctcatttccaact	TTGTCat	CTGTCag	AATGcaaaaaaaattatccttct...154...tgcttcttttag	cgctgaga
O.Cun	aaagattt	gtaagtattact...4753...ttgttgctcatttccaact	TTGTCat	CTGTCag	AATGcaaaaaaaattatccttct...154...tgcttcttttag	cgctgaga
C.Fam	aaagaatt	gtgagtattggg...4753...ttgttgctcatttccaact	TTGTCat	CTGTCag	AATGcaaaaaaaattatccttct...154...tgcttcttttag	cgctgaga
F.Cat	aaagatgt	gtaagtattagt...4753...ttgttgctcatttccaact	TTGTCat	CTGTCag	AATGcaaaaaaaattatccttct...154...tgcttcttttag	cgctgaga
B.Tau	aaagattt	gtaagtatcagt...4753...ttgttgctcatttccaact	TTGTCat	CTGTCag	AATGcaaaaaaaattatccttct...154...tgcttcttttag	cgctgaga
E.Cab	aaagattt	gtaagttagtagt...4753...ttgttgctcatttccaact	TTGTCat	CTGTCag	AATGcaaaaaaaattatccttct...154...tgcttcttttag	cgctgaga
S.Sus	aaagattt	gtaagtattagt...4753...ttgttgctcatttccaact	TTGTCat	CTGTCag	AATGcaaaaaaaattatccttct...154...tgcttcttttag	cgctgaga
O.Avi	aaagattt	gtaagtatcagt...4752...ttgttgctcatttccaact	TTGTCat	CTGTCag	AATGcaaaaaaaattatccttct...155...tgcttcttttag	cgctgaga
L.Afr	aaacaagc	gtaagtactgta...4753...ttgttgctcatttccaact	TTGTCat	CTGTCag	AATGcaaaaaaaattatccttct...154...tgcttcttttag	cgctgaga
	***	** ***	*****	*****	*****	*** **

id=663441 gene=ENSG00000138095 name=LRPPRC segment=chr2.44132920.44139570.-1 type=IN

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R.Mac	aaagcatt	gtaagtattagt...4796...aaaaattatccttctataac	CATTGACAGGATAA	cacaaaagctgtctccaggt...115...tgcttcttttag	cgcggaga
P.Tro	aaagcatt	gtaagtgttagt...4796...aaaaattatccttctataac	CATTGACAGGATAA	cacaaaagctgtctccaggt...115...tgcttcttttag	cgcggaga
P.Abe	aaagcatt	gtaagtgttagt...4796...aaaaattatccttctataac	CATTGACAGGATAA	cacaaaagctgtctccaggt...115...tgcttcttttag	cgcggaga
C.Jac	aaaaagt	gtaagtattagt...4796...aaaaattatccttctataac	CATTGACAGGATAA	cacaaaagctgtctccaggt...115...tgcttcttttag	cgcggaga
C.Por	aaaaatgc	gtaagtgtctggc...4796...aaaaattatccttctataac	CATTGACAGGATAA	cacaaaagctgtctccaggt...115...tgcttcttttag	cgctgaga
O.Cun	aaagattt	gtaagtattact...4796...aaaaattatccttctataac	CATTGACAGGATAA	cacaaaagctgtctccaggt...115...tgcttcttttag	cgctgaga
C.Fam	aaagaatt	gtgagtattggg...4796...aaaaattatccttctataac	CATTGACAGGATAA	cacaaaagctgtctccaggt...115...tgcttcttttag	cgctgaga
F.Cat	aaagatgt	gtaagtattagt...4796...aaaaattatccttctataac	CATTGACAGGATAA	cacaaaagctgtctccaggt...115...tgcttcttttag	cgctgaga
B.Tau	aaagattt	gtaagtatcagt...4796...aaaaattatccttctataac	CATTGACAGGATAA	cacaaaagctgtctccaggt...115...tgcttcttttag	cgctgaga
E.Cab	aaagattt	gtaagttagtagt...4796...aaaaattatccttctataac	CATTGACAGGATAA	cacaaaagctgtctccaggt...115...tgcttcttttag	cgctgaga
S.Sus	aaagattt	gtaagtattagt...4796...aaaaattatccttctataac	CATTGACAGGATAA	cacaaaagctgtctccaggt...115...tgcttcttttag	cgctgaga
O.Avi	aaagattt	gtaagtatcagt...4795...aaaaattatccttctataac	CATTGACAGGATAA	cacaaaagctgtctccaggt...116...tgcttcttttag	cgctgaga
L.Afr	aaacaagc	gtaagtactgta...4796...aaaaattatccttctataac	CATTGACAGGATAA	cacaaaagctgtctccaggt...115...tgcttcttttag	cgctgaga
	***	** ***	*****	*****	*** **

id=663441 gene=ENSG00000138095 name=LRPPRC segment=chr2.44132920.44139570.-1 type=IN VIEW

Figure 53:



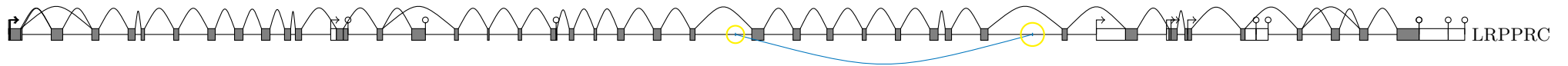
H. Sap	aaagcatt	gtaagtgttagt...4676	.....	gttatnttagtcatcctaata	TGTCAGCATTCAAG	aatctgaaccgattgttttaa	-----	..235	..	tgcttccttttag	cgcggaga
R. Mac	aaagcatt	gtaagtattagt...4676	.....	gttatnttagtcatcctaata	TGTCAGCATTCAAG	aatctgaaccgattgttttaa	-----	..235	..	tgcttccttttag	cgcggaga
P. Tro	aaagcatt	gtaagtgttagt...4676	.....	gttatnttagtcatcctaata	TGTCAGCATTCAAG	aatctgaaccgattgttttaa	-----	..235	..	tgcttccttttag	cgcggaga
P. Abe	aaagcatt	gtaagtgttagt...4676	.....	gttatnttagtcatcctaata	TGTCAGCATTCAAG	aatctgaaccgattgttttaa	-----	..235	..	tgcttccttttag	cgcggaga
C. Jac	aaaaagt	gtaagtattagt...4676	.....	gttatnttagtcatcctaata	TGTCAGCATTCAAG	aatctgaaccgattgttttaa	-----	..235	..	tgcttccttttag	cgcggaga
M. Mus	aaggattt	gtgagtatctgt...4825	..gagaacacaaaagctgtctc	-----	CAGGtcGATAttTTGC	-----	agcaatatttttaacatac	...84	..	tgcttccttttag	cgctgaga
R. Nor	aagattt	gtgagtgtctgt...4420	..gagaacacaaaagctgtctc	-----	CAGGtcGATAttTTGC	-----	agcaatatttttaacatac	...84	..	tgcttccttttag	cgctgaga
C. Por	aaaaatgc	gtaagtgtctggc...4676	.....	gttatnttagtcatcctaata	TGTCAGCATTCAAG	aatctgaaccgattgttttaa	-----	..235	..	tgcttccttttag	cgctgaga
O. Cun	aaagattt	gtaagtattact...4676	.....	gttatnttagtcatcctaata	TGTCAGCATTCAAG	aatctgaaccgattgttttaa	-----	..235	..	tgcttccttttag	cgctgaga
C. Fam	aaagaatt	gtgagtattggg...4676	.....	agttatntta-tcatcctaata	TGTCAGCATTCAAG	aatctgaaccgattgttttaa	-----	..235	..	tgcttccttttag	cgctgaga
F. Cat	aaagatgt	gtaagtattagt...4676	.....	gttatnttagtcatcctaata	TGTCAGCATTCAAG	aatctgaaccgattgttttaa	-----	..235	..	tgcttccttttag	cgctgaga
B. Tau	aaagattt	gtaagtatcagt...4676	.....	gttatnttagtcatcctaata	TGTCAGCATTCAAG	aatctgaaccgattgttttaa	-----	..235	..	tgcttccttttag	cgctgaga
E. Cab	aaagattt	gtaagtattagt...4676	.....	gttatnttagtcatcctaata	TGTCAGCATTCAAG	aatctgaaccgattgttttaa	-----	..235	..	tgcttccttttag	cgctgaga
S. Sus	aaagattt	gtaagtattagt...4676	.....	gttatnttagtcatcctaata	TGTCAGCATTCAAG	aatctgaaccgattgttttaa	-----	..235	..	tgcttccttttag	cgctgaga
L. Afr	aaacaagc	gtaagtactgta...4677	gttatnttagtcatcgaata	TGTCAGCATTCAAG	aatctgaaccgattgttttaa	-----	..234	..	tgcttccttttag	cgctgaga
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id=663441 gene=ENSG00000138095 name=LRPPRC segment=chr2.44132920.44139570.-1 type=IN

H. Sap	tcctacag	gtaatgaccctc-...2127	..accttatgatccctagctca	CTTtgAATGCTtGGCA	gtataaattggagaggaataa	..302	..	ttaatttttag	agatgtgg
R. Mac	tcctacag	gtaatgaccctc-...2124	..accttatgatccctagctca	CTTtgAATGCTtGGCA	gtataaattggagaggaatag	..302	..	ttaatttttag	agatgtgg
P. Tro	tcctacag	gtaatgaccctc-...2127	..accttatgatccctagctca	CTTtgAATGCTtGGCA	gtataaattggagaggaataa	..302	..	ttaatttttag	agatgtgg
P. Abe	tcctacag	gtaatgaccctc-...2123	..accttatgatccctagctca	CTTtgAATGCTtGGCA	gtataaattggagaggaatag	..302	..	ttaatttttag	agatgtgg
C. Jac	tcctacag	gtaatgaccctc-...2077	..accttatgatccctagctca	CTTtgAATGCTtGGCA	gtataaattggagaggaatag	..302	..	ttaatttttag	agatgtgg
M. Mus	tcttagag	gtaatgactcct-...1706	..taatttttataaagaaacga	GCAGtTATctcCCTG	--acaccttattaatgtataa	..343	..	ctgcctttcag	agatgcgg
R. Nor	tcttgag	gtaaggactcct-...1667	..taatttttataaagaaacga	GCAGtTATctcCCTG	--acaccttattaatgtataa	..342	..	gtacttttttag	agatgcgg
C. Por	ttctacag	gtaaggactcag-...2016	..accttatgatccctagctca	CTTtgAATGCTtGGCA	gtataaattggagaggaatag	..323	..	ttaatttttag	agatgtgg
O. Cun	tcctacag	gt-acgaccctct...2003	..accttatgatccccagctca	CTTtgAATGCTtGGCA	gtataaattggagaggaatcg	..301	..	ttaatttttag	agatgtgg
C. Fam	tcttacag	gtaatgactcac-...2095	..accttatgatccctagctca	CTTtgAATGCTtGGCA	gaataaattggagaggaatag	..303	..	ttcgatttttag	agatgtgg
F. Cat	tcctacag	gtaacgagtctc-...2122	..accttatgatccctagctca	CTTtgAATGCTtGGCA	gaataaattggagaggaatag	..306	..	tcaatttttag	agatgcgg
B. Tau	tcctgcag	gtaatgaccgg-...2038	..accttatgatccctagctca	CTTtgAATGCTtGGCA	gtataaattggagaggaatag	..298	..	tcaatttttag	aggtgtgg
E. Cab	tcctacag	gtaatgaccac-...2106	..accttatgatccctagctca	CTTtgAATGCTtGGCA	gtataaattggagaggaatag	..301	..	ttcacttttag	agatgtgg
S. Sus	tctgcag	gtaatggcccat-...2060	..accttatgatccctagctca	CTTtgAATGCTtGGCA	gtataaattggagaggaatag	..300	..	ttcaatttttag	agatgtgg
L. Afr	tcctccag	gt-atgaccacc...2081	..accttgtgatccccgctca	CTTtgAATGCTtGGCA	gtataaattggagagaaatag	..301	..	ttaatttttag	agatgtgg
		* * **	** * *	* ** *	* ** *	* * * *	*	*** **	** ** **

id=663453 gene=ENSG00000138095 name=LRPPRC segment=chr2.44123848.44126357.-1 type=IN VIEW

Figure 54:



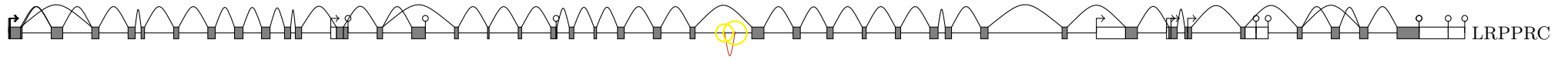
H. Sap	gctccaag	gtaagcctcagc...1107...	atgtagctctgaacgataa	AAGCATc	CATTTAGGAGGAtc	TTAC	agctatagggcagaccatac...241...	acttcattgtag	atgctatt
R. Mac	gctccaag	gtaagcctcagc...1095...	atgtagctctgaacgataa	AAGCATc	CATTTAGGAGGAtc	TTAC	agctatagggcagaccgtac...241...	acttcattgtag	atgctatt
P. Tro	gctccaag	gtaagcctcagc...1107...	atgtagctctgaacgataa	AAGCATc	CATTTAGGAGGAtc	TTAC	agctatagggcagaccatac...241...	acttcattgtag	atgctatt
P. Abe	gctccaag	gtaagcctcagc...1092...	atgtagctctgaacgataa	AAGCATc	CATTTAGGAGGAtc	TTAC	agctatagggcagaccatac...241...	acttcattgtag	atgctatt
C. Jac	gctccaag	gtaagcctcagc...1069...	atgtagctctgaacgataa	AAGCATc	CATTTAGGAGGAtc	TTAC	agctatagggcagaccgtac...241...	acttcattgtag	atgctatt
M. Mus	actccaag	gtaagccccagg...1009...	atgtagctctgaacgataa	AAGCATc	CATTTAGGAGGAtc	TTAC	agctatagggcagaccatgc...241...	acttcattgtag	atgctatt
R. Nor	agtccaag	gtaagtgcagc...1200...	-tgttagctctgcgcgataa	AGCATc	CA-TTAGGAGGAT	cctccagctacagggcagac-----	..246...	acttcattgtag	atgctatt
C. Por	actccaag	gtaagcctcagg...1068...	atgtagctctgaatgataa	AAGCATc	CATTTAGGAGGAtc	TTAC	agctatagggcagactgtac...241...	acttcattgtag	atgctatt
O. Cun	gctccaag	gtaagcacataa...1083...	atgtagctctgaacgataa	AAGCATc	CATTTAGGAGGAtc	TTAC	agctatagggcagaccgtac...241...	acttcattgtag	atgctatt
C. Fam	gctccaag	gtaagcctcggc...1085...	atgtagctctgaacgataa	AAGCATc	CATTTAGGAGGAtc	TTAC	agctatagggcagaccgtac...241...	acttcattgtag	atgctatt
B. Tau	gctccaag	gtaagcatcagc...1092...	atgtagctctgaacgataa	AAGCATc	CATTTAGGAGGAtc	TTAC	agctatagggcagaccgtac...241...	acttcattgtag	atgctatt
E. Cab	gctccaag	gtaagcctcggc...1083...	atgtagctctgaacgataa	AAGCATc	CATTTAGGAGGAtc	TTAC	agctatagggcagaccgtac...241...	acttcattgtag	atgctatt
S. Sus	gctccaag	gtaagtggcagc...4659...	atgtagctctgaacgataa	AAGCATc	CATTTAGGAGGAtc	TTAC	agctatagggcagaccgtac...241...	acttcattgtag	atgctatt
O. Avi	gctccaag	gtaagcatcagc...1086...	atgtagctctgaacgataa	AAGCATc	CATTTAGGAGGAtc	TTAC	agctatagggcagaccgtac...241...	acttcattgtag	atgctatt
L. Afr	gctccaag	gtaagcctgggc...1116...	atgtagcactgaacgataa	AAGCATc	CATTTAGGAGGGT	cctcacgctatagggcagc-----	..247...	acttcattgtag	atgctatt
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id=663425 gene=ENSG00000138095 name=LRPPRC segment=chr2.44171034.44172470.-1 type=IN

H. Sap	aaagcatt	gtaagtgttagt...4925...	atcgatcagaagcatgtca	GTAATCCTTt	CTAAATGtc	TGCTT	ccttttag	cgcggaga
R. Mac	aaagcatt	gtaagtattagt...4925...	atcatatcagaagcatgtca	GTAATCCTTt	CTAAATGtc	TGCTT	ccttttag	cgcggaga
P. Tro	aaagcatt	gtaagtgttagt...4925...	atcgatcagaagcatgtca	GTAATCCTTt	CTAAATGtc	TGCTT	ccttttag	cgcggaga
P. Abe	aaagcatt	gtaagtgttagt...4925...	atcgatcagaagcatgtca	GTAATCCTTt	CTAAATGtc	TGCTT	ccttttag	cgcggaga
C. Jac	aaaaagtt	gtaagtattagt...4925...	atcgatcagaagcatgtca	GTAATCCTTt	CTAAATGtc	TGCTT	ccttttag	cgcggaga
M. Mus	aaggattt	gtgagtactctgt...4925...	atcgatcagaagcatgtca	GTAATCCTTt	CTAAATGtc	TGCTT	ccttttag	cgctgaga
R. Nor	aaagattt	gtgagtgtctgt...4523...	---gtatcagaagcatgtcagta	ATTCTTt	CTAAATGtc	TGCTT	ccttttag	cgctgaga
C. Por	aaaaatgc	gtaagtgtctggc...4925...	atcgatcagaagcatgtca	GTAATCCTTt	CTAAATGtc	TGCTT	ccttttag	cgctgaga
O. Cun	aaagattt	gtaagtattact...4930...	----atcagaagcatgtcagta	TCCTTt	CTAAATGtc	TGCTT	ccttttag	cgctgaga
C. Fam	aaagaatt	gtgagtattggg...4925...	atcgatcagaagcatgtca	GTAATCCTTt	CTAAATGtc	TGCTT	ccttttag	cgctgaga
B. Tau	aaagattt	gtaagtattcagt...4925...	atcgatcagaagcatgtca	GTAATCCTTt	CTAAATGtc	TGCTT	ccttttag	cgctgaga
E. Cab	aaagattt	gtaagttagtagt...4925...	atcgatcagaagcatgtca	GTAATCCTTt	CTAAATGtc	TGCTT	ccttttag	cgctgaga
S. Sus	aaagattt	gtaagtattagt...4925...	atcgatcagaagcatgtca	GTAATCCTTt	CTAAATGtc	TGCTT	ccttttag	cgctgaga
O. Avi	aaagattt	gtaagtattcagt...4925...	atcgatcagaagcatgtca	GTAATCCTTt	CTAAATGtc	TGCTT	ccttttag	cgctgaga
L. Afr	aaacaagc	gtaagtactgta...4931...	----tcaagcatgtcagta	att	CCTTt	CTAAATGtc	TGCTT	ccttttag
	**	** ***	*****	*****	*****	*****	*****	*****

id=663441 gene=ENSG00000138095 name=LRPPRC segment=chr2.44132920.44139570.-1 type=IN VIEW

Figure 55:



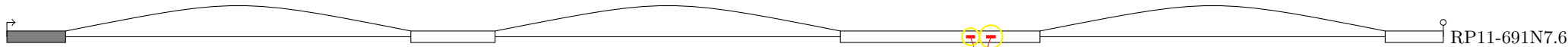
H. Sap	gctccaag	gtaagcctcagc...	.922	----	tgtattaacatgcagctcttt	TG	----	GAaaGCTTTcATT	----	G-gctctgcttggttaattag	...	.435	...	acttcattgtag	atgctatt
R. Mac	gctccaag	gtaagcctcagc...	.910	----	tgtattaacatgcagctcttt	TG	----	GAaaGCTTTcATT	----	G-gctctgcttggttaattag	...	.435	...	acttcattgtag	atgctatt
P. Tro	gctccaag	gtaagcctcagc...	.922	----	tgtattaacatgcagctcttt	TG	----	GAaaGCTTTcATT	----	G-gctctgcttggttaattag	...	.435	...	acttcattgtag	atgctatt
P. Abe	gctccaag	gtaagcctcagc...	.907	----	tgtattaacatgcagctcttt	TG	----	GAaaGCTTTcATT	----	G-gctctgcttggttaattag	...	.435	...	acttcattgtag	atgctatt
C. Jac	gctccaag	gtaagcctcagc...	.884	----	tgtattaacatgcagctcttt	TG	----	GAaaGCTTTcATT	----	G-gctctgcttggttaattag	...	.435	...	acttcattgtag	atgctatt
M. Mus	actccaag	gtaagccccagg...	.824	----	tgtattagatgcagctcttt	TG	----	GAaaGCTTTcATT	----	G-gctctgcttggttaattag	...	.435	...	acttcattgtag	atgctatt
R. Nor	agtgcaag	gtaagtgcagccc...	.1009	...	tctaagtattagcatgcag	TCTT	TG	----	GAaaGCTTTcATT	----	G-gctctgcttggttaattag434	...	acttcattgtag	atgctatt
C. Por	acttcaag	gtaagcctcagg...	.1058	----	tgattagcagatgtagctc	TGAATGATAAAAGcATCCatTTAGG	----	GAaaGCTTTcATT	----	G-gctctgcttggttaattag	...	.251	...	acttcattgtag	atgctatt
O. Cun	gctccaag	gtaagcacataa...	.898	----	tgtattagcagctcttt	TG	----	GAaaGCTTTcATT	----	G-gctctgcttggttaattag	...	.435	...	acttcattgtag	atgctatt
C. Fam	gctccaag	gtaagcctcggc...	.900	----	tgtattaacatgcagctcttt	TG	----	GAaaGCTTTcATT	----	G-gctctgcttggttaattag	...	.435	...	acttcattgtag	atgctatt
B. Tau	gctccaag	gtaagcatcagc...	.907	----	tgtattaacatgcagctcttt	TG	----	GAaaGCTTTcATT	----	G-gctctgcttggttaattag	...	.435	...	acttcattgtag	atgctatt
E. Cab	gctccaag	gtaagcctcggc...	.898	----	tgtattaacatgcagctcttt	TG	----	GAaaGCTTTcATT	----	G-gctctgcttggttaattag	...	.435	...	acttcattgtag	atgctatt
S. Sus	gctccaag	gtaagtggcagc...	.4474	----	tgtattaacatgcagctcttt	TG	----	GAaaGCTTTcATT	----	G-gctctgcttggttaattag	...	.435	...	acttcattgtag	atgctatt
O. Avi	gctccaag	gtaagcatcagc...	.901	----	agtattaacatgcagctcttt	TG	----	GAaaGCTTTcATT	----	G-gctctgcttggttaattag	...	.435	...	acttcattgtag	atgctatt
L. Afr	gctccaag	gtaagcctgggc...	.931	----	tgtattaacatgcagctcttt	TG	----	GAaaGCTTTcATT	----	G-gctctgcttggttaattag	...	.435	...	acttcattgtag	atgctggt
		* ****	*****		* ** * *		**	***** * ****		* *		**** * *		*****	***** **	

id=663425 gene=ENSG00000138095 name=LRPPRC segment=chr2.44171034.44172470.-1 type=IN

H. Sap	gctccaag	gtaagcctcagc...	.1101	...	tagcagatgtagctctgaa	-----	CGATaAAAGC	-----	aTCCA	tttaggaggatcttacagctatagggcagaccatacaggg	:::::	acctaagggtctttt	gtgtacttcattgtag	atgctatt
R. Mac	gctccaag	gtaagcctcagc...	.1089	...	tagcagatgtagctctgaa	-----	CGATaAAAGC	-----	aTCCA	tttaggaggatcttacagctatagggcagaccatacaggg	:::::	acctaagggtctttt	gtgtacttcattgtag	atgctatt
P. Tro	gctccaag	gtaagcctcagc...	.1101	...	tagcagatgtagctctgaa	-----	CGATaAAAGC	-----	aTCCA	tttaggaggatcttacagctatagggcagaccatacaggg	:::::	acctaagggtctttt	gtgtacttcattgtag	atgctatt
P. Abe	gctccaag	gtaagcctcagc...	.1086	...	tagcagatgtagctctgaa	-----	CGATaAAAGC	-----	aTCCA	tttaggaggatcttacagctatagggcagaccatacaggg	:::::	acctaagggtctttt	gtgtacttcattgtag	atgctatt
C. Jac	gctccaag	gtaagcctcagc...	.1063	...	tagcagatgtagctctgaa	-----	CGATaAAAGC	-----	aTCCA	tttaggaggatcttacagctatagggcagaccatacaggg	:::::	acctaagggtctttt	gtgtacttcattgtag	atgctatt
M. Mus	actccaag	gtaagccccagg...	.1003	...	tagcagatgtagctctgaa	-----	CGATaAAAGC	-----	aTCCA	tttaggaggatcttacagctatagggcagaccatacaggg	:::::	acctaagggtctttt	gtgtacttcattgtag	atgctatt
R. Nor	agtgcaag	gtaagtgcagccc...	.1193	...	tagcagatgtagctctgaa	-----	CGATaAAAGC	-----	aTCCA	tttaggaggatcttacagctatagggcagaccatacaggg	:::::	acctaagggtctttt	gtgtacttcattgtag	atgctatt
C. Por	acttcaag	gtaagcctcagg...	.1335	...	gttttcctacatgaaatta	-----	C-CTAAGGGTCTTTTgtGTTA	-----	aTCCA	tttaggaggatcttacagctatagggcagaccatacaggg	:::::	acctaagggtctttt	gtgtacttcattgtag	atgctatt
O. Cun	gctccaag	gtaagcacataa...	.1077	...	tagcagatgtagctctgaa	-----	CGATaAAAGC	-----	aTCCA	tttaggaggatcttacagctatagggcagaccatacaggg	:::::	acctaagggtctttt	gtgtacttcattgtag	atgctatt
C. Fam	gctccaag	gtaagcctcggc...	.1079	...	tagcagatgtagctctgaa	-----	CGATaAAAGC	-----	aTCCA	tttaggaggatcttacagctatagggcagaccatacaggg	:::::	acctaagggtctttt	gtgtacttcattgtag	atgctatt
B. Tau	gctccaag	gtaagcatcagc...	.1086	...	tagcagatgtagctctgaa	-----	CGATaAAAGC	-----	aTCCA	tttaggaggatcttacagctatagggcagaccatacaggg	:::::	acctaagggtctttt	gtgtacttcattgtag	atgctatt
E. Cab	gctccaag	gtaagcctcggc...	.1077	...	tagcagatgtagctctgaa	-----	CGATaAAAGC	-----	aTCCA	tttaggaggatcttacagctatagggcagaccatacaggg	:::::	acctaagggtctttt	gtgtacttcattgtag	atgctatt
S. Sus	gctccaag	gtaagtggcagc...	.4653	...	tagcagatgtagctctgaa	-----	CGATaAAAGC	-----	aTCCA	tttaggaggatcttacagctatagggcagaccatacaggg	:::::	acctaagggtctttt	gtgtacttcattgtag	atgctatt
O. Avi	gctccaag	gtaagcatcagc...	.1080	...	tagcagatgtagctctgaa	-----	CGATaAAAGC	-----	aTCCA	tttaggaggatcttacagctatagggcagaccatacaggg	:::::	acctaagggtctttt	gtgtacttcattgtag	atgctatt
L. Afr	gctccaag	gtaagcctgggc...	.1110	...	tagcagatgtagcactgaa	-----	CGATaAAAGC	-----	aTCCA	tttaggaggatcttacagctatagggcagaccatacaggg	:::::	acctaagggtctttt	gtgtacttcattgtag	atgctggt
		* ****	*****		*** * **		* ** * *		* **				*****	***** **

id=663425 gene=ENSG00000138095 name=LRPPRC segment=chr2.44171034.44172470.-1 type=IN VIEW

Figure 56:



H. Sap	cccggtag	tgtgaagtgagg...142...gcccagtttgagaagctgac	CCGGGCGCT	GAGG	aggaacggcgccacgtctcg...69...cgccggcatcag	gtaacccc
R. Mac	cccggtag	tgtgaagtgagg...142...gcccagtttgagaagctgac	CCGGGCGCT	GAGG	aggaacggcgccacgtctcg...69...cgccggcatcag	gtaacccc
P. Tro	cccggtag	tgtgaagtgagg...142...gcccagtttgagaagctgac	CCGGGCGCT	GAGG	aggaacggcgccacgtctcg...69...cgccggcatcag	gtaacccc
P. Abe	cccggtag	tgtgaattgagg...142...gcccagtttgagaagctgac	CCGGGCGCT	GAGG	aggaacggcgccacgtctcg...69...cgccggcatcag	gtaacccc
C. Jac	cccggtag	tgtgaagtgagg...142...gcccagtttgagaagctgac	CCGGGCGCT	GAGG	aggaacggcgccacgtctcg...69...cgccggcatcag	gtaacccc
C. Por	cccgatag	tgtgaagtgagg...136...gcccagtttgagaagctgac	CCGGGCGCT	GAGG	aggaacggcgccacgtctcg...69...cgccggcaccag	gtaacccc
O. Cun	cccagtag	tctgaagtgagg...142...gcccagtttgagaagctgac	CCGGGCGCT	GAGG	aggaacggcgccacgtctcg...69...cgccggcatcag	gtaacccc
C. Fam	ctcggtag	tgtgaagtgagg...145...gcccagtttgagaagctgac	CCGGGCGCT	GAGG	aggaacggcgccacgtctcg...69...cgccggcatcag	gtaacccc
F. Cat	cccggtag	tgtgaagtgagg...145...gcccagtttgagaagctgac	CCGGGCGCT	GAGG	aggaacggcgccacgtctcg...69...cgccggcatcag	gtaaccca
B. Tau	cccggtag	tgtgcagtgagg...120...gcccagtttgagaagctgac	CCGGGCGCT	GAGG	aggaacggcgccacgtctcg...69...cgccggcaccag	gtaaccct
E. Cab	cccggtag	tgtgaagtgagg...142...gcccagtttgagaagctgac	CCGGGCGCT	GAGG	aggaacggcgccacgtctcg...69...cgccggcatcag	gtaacccc
S. Sus	cccggtag	tgtgaagtgagg...142...gcccagtttgagaagctgac	CCGGGCGCT	GAGG	aggaacggcgccacgtctcg...69...cgccggcatcag	gtaacccc
O. Avi	cccggtag	tgtgcagtgagg...120...gcccagtttgagaagctgac	CCGGGCGCT	GAGG	aggaacggcgccacgtctcg...69...cgccggcaccag	gtaaccct
L. Afr	cccggtag	tgtgaagtgagg...143...gcccagtttgagaagctgac	CCGGGCGCT	GAGG	aggaacggcgccacgtctcg...69...cgccggcatcag	gtaacccc
	* * *	* * * *****	** ** *****	*****	*****	** ***** ** *****

id=259697 gene=ENSG00000254732 name=RP11-691N7.6 segment=chr11.57558857.57559145.1 type=E3

H. Sap	cccggtag	tgtgaagtgagg...171...ggaggaggaacggcgccacg	TCTCGGCGG	CTGG	aacgcgtccgggtctcacca...39...cgccggcatcag	gtaacccc
R. Mac	cccggtag	tgtgaagtgagg...171...ggaggaggaacggcgccacg	TCTCGGCGG	CTGG	aacgcgtccgggtctcacca...39...cgccggcatcag	gtaacccc
P. Tro	cccggtag	tgtgaagtgagg...171...ggaggaggaacggcgccacg	TCTCGGCGG	CTGG	aacgcgtccgggtctcacca...39...cgccggcatcag	gtaacccc
P. Abe	cccggtag	tgtgaattgagg...171...ggaggaggaacggcgccacg	TCTCGGCGG	CTGG	aacgcgtccgggtctcacca...39...cgccggcatcag	gtaacccc
C. Jac	cccggtag	tgtgaagtgagg...171...ggaggaggaacggcgccacg	TCTCGGCGG	CTGG	aacgcgtccgggtctcacca...39...cgccggcatcag	gtaacccc
C. Por	cccgatag	tgtgaagtgagg...165...ggaggaggaacggcgccacg	TCTCGGCGG	CTGG	aacgcgtccgggtctcacca...39...cgccggcaccag	gtaacccc
O. Cun	cccagtag	tctgaagtgagg...171...ggaggaggaacggcgccacg	TCTCGGCGG	CTGG	aacgcgtccgggtctcacca...39...cgccggcatcag	gtaacccc
C. Fam	ctcggtag	tgtgaagtgagg...174...ggaggaggaacggcgccacg	TCTCGGCGG	CTGG	aacgcgtccgggtctcacca...39...cgccggcatcag	gtaacccc
F. Cat	cccggtag	tgtgaagtgagg...174...ggaggaggaacggcgccacg	TCTCGGCGG	CTGG	aacgcgtccgggtctcacca...39...cgccggcatcag	gtaaccca
B. Tau	cccggtag	tgtgcagtgagg...149...ggaggaggaacggcgccacg	TCTCGGCGG	CTGG	aacgcgtccgggtctcacca...39...cgccggcaccag	gtaaccct
E. Cab	cccggtag	tgtgaagtgagg...171...ggaggaggaacggcgccacg	TCTCGGCGG	CTGG	aacgcgtccgggtctcacca...39...cgccggcatcag	gtaacccc
S. Sus	cccggtag	tgtgaagtgagg...171...ggaggaggaacggcgccacg	TCTCGGCGG	CTGG	aacgcgtccgggtctcacca...39...cgccggcatcag	gtaacccc
O. Avi	cccggtag	tgtgcagtgagg...149...ggaggaggaacggcgccacg	TCTCGGCGG	CTGG	aacgcgtccgggtctcacca...39...ggcggcaccag	gtaaccct
L. Afr	cccggtag	tgtgaagtgagg...172...ggaggaggaacggcgccacg	TCTCGGCGG	CTGG	aacgcgtccgggtctcacca...39...cgccggcatcag	gtaacccc
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id=259697 gene=ENSG00000254732 name=RP11-691N7.6 segment=chr11.57558857.57559145.1 type=E3 VIEW

Figure 57:



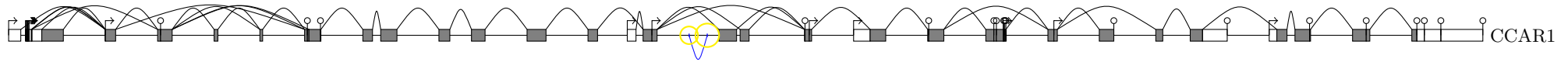
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R. Mac	gtatagtt	gtatgttctttt...	324	-----	tgggtggccttgaaaattggg	GCAAGaTCACACA	ctGTGT	ggtttgggag-accggcagt-	...	254	...	ttt	gatgtcag	gatgaaga	
P. Tro	gtatagtt	gtatgttctttt...	324	-----	tgggtggccttgaaaattggg	GCAAGaTCACACA	ctGTGT	ggtttgggag-accggcagt-	...	253	...	ttt	gatgtcag	gatgaaga	
P. Abe	gtatagtt	gtatgttctttt...	323	-----	tgggtggccttgaaaattggg	GCAAGaTCACACA	ctGTGT	ggtttgggag-accggcagt-	...	253	...	ttt	gatgtcag	gatgaaga	
C. Jac	gtatagtt	gtatgttctttt...	324	-----	tgggtggccttgaaaattggg	GCAAGaTCACACA	ctGTGT	ggtttgggag-accggcagt-	...	254	...	ttt	gatgtcag	gatgaaga	
M. Mus	gtatagtt	gcattttctttt...	313	..	gtccttgggtggttt	gaaaTTGGGg	CAAGaTCACA	caCTGTGTG	g	tttagtgag-accggcagtg...	249	...	ttt	gatgttag	gatgaaga
C. Por	gaatagtt	gtatgttcttct...	322	-----	ggggtggccttgaaaattggg	GCAAGaTCACACA	ctGTGT	ggtttagtgag-accggcagt-	...	254	...	ttt	aatattag	gatgaaga	
O. Cun	gtatagtt	gtatgttctttt...	322	-----	tgggtggccttgaaaattggg	GCAAGaTCACACA	ctGTGT	ggtttagtgag-accggcagt-	...	254	...	ttt	gatgtcag	gatgaaga	
C. Fam	gtatagtt	gtatgttctttt...	332	-----	tgggtggccttgaaaattggg	GCAAGaTCACACA	ctGTGT	ggtttagtgag-accggcagt-	...	254	...	ttt	tatatcag	gatgaaga	
F. Cat	gtatagtt	ttatgttctttt...	330	-----	tgggtggccttgaaaattggg	GCAAGaTCACACA	ctGTGT	ggtttagtgag-accggcagt-	...	254	...	ttt	tatatcag	gatgaaga	
B. Tau	gtatagtt	gtatgttctttt...	329	-----	tgggtggccttgaaaattggg	GCAAGaTCACACA	ctGTGT	ggtttagtgagaccggcag-	...	256	...	ttt	tatatcag	gatgaaga	
E. Cab	gtatagtt	gtatgttctttc...	332	-----	tgggtggccttgaaaattggg	GCAAGaTCACACA	ctGTGT	ggtttagtgag-accggcagt-	...	254	...	ttt	tacacag	gatgaaga	
S. Sus	gtatagtt	g-atgttctttc...	332	-----	tgggtggccttgaaaattggg	GCAAGaTCACACA	ctGTGT	ggtttagtgag-accggcagt-	...	254	...	ttt	tatatcag	gatgaaga	
O. Avi	gtatagtt	gtatgttctttt...	330	-----	tgggtggccttgaaaattggg	GCAAGaTCACACA	ctGTGT	ggtttagtgagaccggcag-	...	256	...	ttt	tatatcag	gatgaaga	
L. Afr	cagcagta	gtatgttctttt...	328	-----	gggtggccttgaaaattggg	CAAGaTCACACA	ctGTGT	ggtttagtgag-accggcagt-	...	253	...	ttt	catatcag	gatgaaga	
	***	** * * *			*****	*****	*	*****		*****		***	* * *	*****	

id=750111 gene=ENSG0000060339 name=CCAR1 segment=chr10_70516390_70517050_1 type=IN

H. Sap	gtatagtt	gtatgttctttt...	527	..	ttaggagaagacaatctgaa--	ACATtTGTGAc	CTTGC	----	acaga----	tcagcaacagacttt...	54	...	ttt	gatgtcag	gatgaaga	
R. Mac	gtatagtt	gtatgttctttt...	527	..	ttaggagaagacaatctgaa--	ACATtTGTGAc	CTTGC	----	acaga----	tcagcaacagacttt...	54	...	ttt	gatgtcag	gatgaaga	
P. Tro	gtatagtt	gtatgttctttt...	527	..	ttaggagaagacaatctgaa--	ACATT	GTGAc	CTTGC	----	acaga----	tcagcaacagacttt...	54	...	ttt	gatgtcag	gatgaaga
P. Abe	gtatagtt	gtatgttctttt...	526	..	ttaggagaagacaatctgaa--	ACATtTGTGAc	CTTGC	----	acaga----	tcagcaacagacttt...	53	...	ttt	gatgtcag	gatgaaga	
C. Jac	gtatagtt	gtatgttctttt...	527	..	ttaggagaagacaatctgaa--	ACATtTGTGAc	CTTGC	----	acaga----	tcagcaacagacttt...	54	...	ttt	gatgtcag	gatgaaga	
M. Mus	gtatagtt	gcattttctttt...	464	..	gtcagttaaaagtggtagaa	TGTATGGA	TGTGGA	CTTGCTAA	ataataacttttaggagaaga----	100	...	ttt	gatgttag	gatgaaga		
C. Por	gaatagtt	gtatgttcttct...	525	..	ttaggagaagacaatctgaa--	ACATtTGTGAc	CTTGC	----	acaga----	tcagcaacagacttt...	54	...	ttt	aatattag	gatgaaga	
O. Cun	gtatagtt	gtatgttctttt...	525	..	ttaggagaagacaatctgaa--	ACATtTGTGAc	CTTGC	----	acaga----	tcagcaacagacttt...	54	...	ttt	gatgtcag	gatgaaga	
C. Fam	gtatagtt	gtatgttctttt...	535	..	ttaggagaagacaatctgaa--	ACATtTGTGAc	CTTGC	----	acaga----	tcagcaacagacttt...	54	...	ttt	gatatatcag	gatgaaga	
F. Cat	gtatagtt	ttatgttctttt...	533	..	ttaggagaagacaatctgaa--	ACATtTGTGAc	CTTGC	----	acaga----	tcagcaacagacttt...	54	...	ttt	gatatatcag	gatgaaga	
B. Tau	gtatagtt	gtatgttctttt...	533	..	ttaggagaagacaatctgaa--	ACATtTGTGAc	CTTGC	----	acaga----	tcagcaacagacttt...	55	...	ttt	gatatatcag	gatgaaga	
E. Cab	gtatagtt	gtatgttctttc...	535	..	ttaggagaagacaatctgaa--	ACATtTGTGAc	CTTGC	----	acaga----	tcagcaacagacttt...	54	...	ttt	gtacacag	gatgaaga	
S. Sus	gtatagtt	g-atgttctttc...	535	..	ttaggagaagacaatctgaa--	ACATtTGTGAc	CTTGC	----	acaga----	tcagcaacagacttt...	54	...	ttt	gatatatcag	gatgaaga	
O. Avi	gtatagtt	gtatgttctttt...	534	..	ttaggagaagacaatctgaa--	ACATtTGTGAc	CTTGC	----	acaga----	tcagcaacagacttt...	55	...	ttt	gatatatcag	gatgaaga	
L. Afr	cagcagta	gtatgttctttt...	529	..	ttaggagaagacaatctgaa--	ACATtTGTGAc	CTTGC	----	acaga----	tcagcaacagacttt...	55	...	ttt	catatcag	gatgaaga	
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id=750111 gene=ENSG0000060339 name=CCAR1 segment=chr10_70516390_70517050_1 type=IN VIEW

Figure 58:



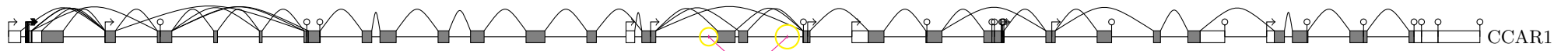
H. Sap	acacaatg	gtaagtactaat...333...	agttgc-gattat	ttttgttc	AGCCATA	TTTCTCTT	---	gaggcttatt	gtcctgtgt-	...	323...	cccttgcaacag	gtaccggt
R. Mac	acacaatg	gtaagtaccaat...331...	agttgc-gattat	ttttgttc	CAGCCATA	TTTCTCTT	---	gaggcttatt	gtcctgtgt-	...	323...	cccttgcaacag	gtaccggt
P. Tro	acacaatg	gtaagtactaat...333...	agttgc-gattat	ttttgttc	AGCCATA	TTTCTCTT	---	gaggcttatt	gtcctgtgt-	...	323...	cccttgcaacag	gtaccggt
P. Abe	acacaatg	gtaagtactaat...333...	agttgc-gattat	ttttgttc	AGCCATA	TTTCTCTT	---	gaggcttatt	gtcctgtgt-	...	323...	cccttgcaacag	gtaccggt
C. Jac	acacaatg	gtaagtaccaac...329...	gctgctgattat	ttttgttc	AGCCATA	TTTCTCTT	---	gaggcttatt	gtcctgtgt-	...	323...	cccttgcaacag	gtaccggt
M. Mus	acacagtg	gtaagtaccaat...332...	gttgctgattat	ttttgttc	AGCCATA	TTTCTCTT	---	gaggcttatt	gtcctgtgt-	...	320...	cccttgcaacag	gtaccggt
R. Nor	acacaatg	gtaagtaccggt...323...	gttgctgattat	ttttgttc	AGCCATA	TTTCTCTT	---	gaggcttact	gtccttgt-	...	320...	cccttgcaacag	gtaccggt
C. Por	acacaatg	gtaagcaccggt...331...	gttgctgattat	ttttgttc	AGCCATA	TTTCTCTT	---	gaggcttatt	tatcctatgc-	...	323...	cccttgcaacag	gtaccggt
O. Cun	acacaatg	gtaagtaccaat...346...	gttgctgattat	ttttgttc	AGCCATA	TTTCTCTT	---	gagggttatt	gtccttgt-	...	323...	cccttgcaacag	gtaccggt
C. Fam	acacaatg	gtaagtactaat...337...	gttgctgattat	ttttgttc	AGCCATA	TTTCTCTT	---	gaggcttatt	gtccttgt-	...	317...	cccttgcaacag	gtaccggt
F. Cat	acacaatg	gtaagtactaat...247...	atTTTTTTTCTT	tagacca-	ACCTca	AGTCTTGc	AGCA	aaaatttctt	tactgatgtg...	...	60...	cccttgcaacag	gtaccggt
E. Cab	acacaatg	gtaagtaccaat...334...	gttgctgattat	ttttgttc	AGCCATA	TTTCTCTT	---	gaggcttatt	gtcctgtgt-	...	320...	cccttgcaacag	gtaccggt
S. Sus	acacaatg	gtaagtaccaat...342...	TTTTTTTTTTT	TTTgttc	AGCCATA	TTTCTCTT	---	gaggcttatt	gtcctgtgt-	...	320...	cccttgcaacag	gtaccggt
L. Afr	acacaatg	gtaagtaccact...337...	gttgctgattat	ttttgttc	AGCCATA	TTTCTCTT	---	gaggcttatt	gtcctgtgt-	...	322...	cccttgcaacag	gtaccggt
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id=750107 gene=ENSG0000060339 name=CCAR1 segment=chr10_70515294_70516029_1 type=IN

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R. Mac	acacaatg	gtaagtaccaat...549...	atattgtacaaa	----	tgtaccaa	-----	AAGAGGAA	TATGGCT	tctataatt-tttttt	ccttagaccaac	ctcaagttcctt	tttttccaacatg	ccttcccttgcaacag	gtaccggt
P. Tro	acacaatg	gtaagtactaat...551...	atattgtacaaa	----	tgtaccaa	-----	AAGAGGAA	TATGGCT	tctataatt-tttttt	ccttagaccaac	ctcaagttcctt	.....	tttttccaacatg	ccttcccttgcaacag	gtaccggt
P. Abe	acacaatg	gtaagtactaat...551...	atattgtacaaa	----	tgtaccaa	-----	AAGAGGAA	TATGGCT	tctataatt-tttttt	ccttagaccaac	ctcaagttcctt	.....	tttttccaacatg	ccttcccttgcaacag	gtaccggt
C. Jac	acacaatg	gtaagtaccaac...547...	atattgtacaaa	----	tgtaccaa	-----	AAGAGGAA	TATGGCT	tctataatt-tttttt	ccttagaccaac	ctcaagttcctt	.....	tttttccaacatg	ccttcccttgcaacag	gtaccggt
M. Mus	acacagtg	gtaagtaccaat...547...	ctattatccaaa	----	tgtaccaa	-----	AAGAGGAA	TATGGCT	tctataatt-tttttt	ccttagaccaac	ctcaagttcctt	.....	tttttccaacatg	ccttcccttgcaacag	gtaccggt
R. Nor	acacaatg	gtaagtaccggt...538...	ctattatccaaa	----	tgtaccaa	-----	AAGAGGAA	TATGGCT	tctataatt-tttttt	ccttagaccaac	ctcaagttcctt	.....	tttttccaacatg	ccttcccttgcaacag	gtaccggt
C. Por	acacaatg	gtaagcaccggt...549...	atattctacaaa	----	tgtaccaa	-----	AAGAGGAA	TATGGCT	tctataatt-tttttt	ccttagaccaac	ctcaagttcctt	.....	tttttccaacatg	ccttcccttgcaacag	gtaccggt
O. Cun	acacaatg	gtaagtaccaat...564...	atattgtacaaa	----	tgtaccaa	-----	AAGAGGAA	TATGGCT	tctataatt-tttttt	ccttagaccaac	ctcaagttcctt	.....	tttttccaacatg	ccttcccttgcaacag	gtaccggt
C. Fam	acacaatg	gtaagtactaat...549...	atattgtacaaa	----	tgtaccaa	-----	AAGAGGAA	TATGGCT	tctataatt-tttttt	ccttagaccaac	ctcaagttcctt	.....	tttttccaacatg	ccttcccttgcaacag	gtaccggt
F. Cat	acacaatg	gtaagtactaat...284...	-----	caaaattctt	tacttgat	TGCTa	CAAGtg	AACTa	GGGT	-----	.....	.....	tttttccaacatg	ccttcccttgcaacag	gtaccggt
E. Cab	acacaatg	gtaagtaccaat...549...	atattgtacaaa	----	tgtaccaa	-----	AAGAGGAA	TATGGCT	tctataatt-tttttt	ccttagaccaac	ctcaagttcctt	.....	tttttccaacatg	ccttcccttgcaacag	gtaccggt
S. Sus	acacaatg	gtaagtaccaat...556...	ctattgtacaaa	----	tgtaccaa	-----	AAGAGGAA	TATGGCT	tctataatt-tttttt	ccttagaccaac	ctcaagttcctt	.....	tttttccaacatg	ccttcccttgcaacag	gtaccggt
L. Afr	acacaatg	gtaagtaccact...554...	atattgtacaaa	----	tgtaccaa	-----	AAGAGGAA	TATGGCT	tctataatt-tttttt	ccttagaccaac	ctcaagttcctt	tttttccaacatg	ccttcccttgcaacag	gtaccggt
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id=750107 gene=ENSG0000060339 name=CCAR1 segment=chr10_70515294_70516029_1 type=IN VIEW

Figure 59:



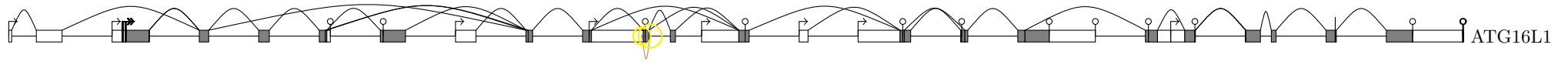
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R. Mac	acacaatg	gtaagtaccaat...583...	cttctataa-ttttttttct	TTAGa	CCAAcc	TCAAG	ttcttgcagcaaaatttctt...71...	cccttgcaacag	gtaccggt
P. Tro	acacaatg	gtaagtactaat...585...	cttctataa-ttttttttct	TTAGa	CCAAcc	TCAAG	ttcttgcagcaaaatttctt...71...	cccttgcaacag	gtaccggt
P. Abe	acacaatg	gtaagtactaat...585...	cttctataa-ttttttttct	TTAGa	CCAAcc	TCAAG	ttcttgcagcaaaatttctt...71...	cccttgcaacag	gtaccggt
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M. Mus	acacagtg	gtaagtaccaat...581...	cttctataa-ttttttttct	TTAGa	CCAAcc	TCAAG	ttcttgcagcaaaatttctt...71...	cccttgcaacag	gtaccggt
C. Por	acacaatg	gtaagcaccggt...583...	cttctataa-ttttttttct	TTAGa	CCAAcc	TCAAG	ttcttgcagcaaaatttctt...71...	cccttgcaacag	gtaccggt
O. Cun	acacaatg	gtaagtaccaat...598...	cttctataa-ttttttttct	TTAGa	CCAAcc	TCAAG	ttcttgcagcaaaatttctt...71...	cccttgcaacag	gtaccggt
C. Fam	acacaatg	gtaagtactaat...583...	cttctataa-ttttttttct	TTAGa	CCAAcc	TCAAG	ttcttgcagcaaaatttctt...71...	cccttgcaacag	gtaccggt
F. Cat	acacaatg	gtaagtactaat...239...	cttctataa-ttttttttct	TTAGa	CCAAcc	TCAAG	ttcttgcagcaaaatttctt...71...	cccttgcaacag	gtaccggt
E. Cab	acacaatg	gtaagtaccaat...583...	cttctataa-ttttttttct	TTAGa	CCAAcc	TCAAG	ttcttgcagcaaaatttctt...71...	cccttgcaacag	gtaccggt
S. Sus	acacaatg	gtaagtaccaat...591...	-ttctataatttttttttct	TTAGa	CCAAcc	TCAAG	ttcttgcagcaaaatttctt...71...	cccttgcaacag	gtaccggt
L. Afr	acacaatg	gtaagtaccact...588...	cttctataa-ttttttttct	TTAGa	CCAAcc	TCAAG	ttcttgcagcaaaatttctt...71...	cccttgcaacag	gtaccggt
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id=750107 gene=ENSG0000060339 name=CCAR1 segment=chr10_70515294_70516029_1 type=IN

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P. Tro	gtatagtt	gtatgttctttt...428...	ttgtgtttcacagatctggc	TTTGATTGGCTGA	tgagtgtc	tttgtgatcagt	----...155...	tttgtatgtcag	gatgaaga
P. Abe	gtatagtt	gtatgttctttt...427...	ttgtgtttcacagatctggc	TTTGATTGGCTGA	tgagtgtc	tttgtgatcagt	----...155...	tttgtatgtcag	gatgaaga
C. Jac	gtatagtt	gtatgttctttt...428...	ttgtgtttcacagatctggc	TTTGATTGGCTGA	tgagtgtc	tttgtgatcagt	----...156...	tttgtatgtcag	gatgaaga
M. Mus	gtatagtt	gcattttctttt...421...	ttgtgtttcacagatctggc	TTTGATTGGCTGA	---	tgcttttggtcagttaaa	...153...	tttgtatgttag	gatgaaga
C. Por	gaatagtt	gtatgttcttct...426...	ttgtgtttcacagatctggc	TTTGATTGGCTGA	tgagtgtc	tttgtgatcagt	----...156...	tttaaatattag	gatgaaga
O. Cun	gtatagtt	gtatgttctttt...426...	ttgtgtttcacagatctggc	TTTGATTGGCTGA	tgagtgtc	tttgtgatcagt	----...156...	tttgtatgtcag	gatgaaga
C. Fam	gtatagtt	gtattttctttt...436...	ttgtgtttcacagatctggc	TTTGATTGGCTGA	tgagtgtc	tttgtgatcagt	----...156...	tttgtatatcag	gatgaaga
F. Cat	gtatagtt	ttattttctttt...434...	ttgtgtttcacagatctggc	TTTGATTGGCTGA	tgagtgtc	tttgtgatcagt	----...156...	tttgtatatcag	gatgaaga
E. Cab	gtatagtt	gtatgttctttt...436...	ttgtgtttcacagatctggc	TTTGATTGGCTGA	tgagtgtc	tttgtgatcagt	----...156...	tttgtacatcag	gatgaaga
S. Sus	gtatagtt	g-atgttctttt...436...	ttgtgtttcacagatctggc	TTTGATTGGCTGA	tgagtgtc	tttgtgatcagt	----...156...	tttgtatatcag	gatgaaga
L. Afr	cagcagta	gtatgttctttt...431...	ttgtgtttcacagatctggc	TTTGATTGGCTGA	tgagtgtc	tttgtgatcagt	----...155...	tttgcatatcag	gatgaaga
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id=750111 gene=ENSG0000060339 name=CCAR1 segment=chr10_70516390_70517050_1 type=IN VIEW

Figure 60:



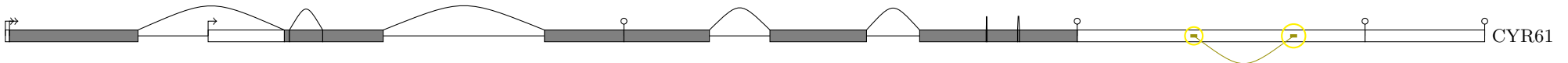
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R. Mac	gcagccac	gtaagtaggcgg...588...tgggcaaaatgtttctaagg	TTTAaACCTATCC	tcccctcctctttag	taagcgac
P. Tro	gcagccac	gtaagtaggcag...607...tgggcaaaatgtttctaagg	TTTAaACCTATCC	tcccctcctctttag	taagcgac
P. Abe	gcagccac	gtaagtaggcag...610...tgggcaaaatgtttctaagg	TTTAaACCTATCC	tcccctcctctttag	taagcgac
C. Jac	gcagccac	gtaagtaggcag...488...tgggcaaaatgtttctaagg	TTTAaACCTATCC	tcccctcctctttag	taagcgac
M. Mus	gcagctac	gtgagtggactg...521...ggggcaaaatgtttctaagg	TTTAaACCTATCC	tcccctcctctttag	taagcgac
R. Nor	gcagctac	gtgagtggactg...527...ggggcaaaatgtttctaagg	TTTAaACCTATCC	tcccctcctctttag	taagcgac
C. Por	gtagccac	gtaagtaccag...625...tgggcagaatgtttctaagg	TTTAaACCTATCC	tcccctcctctttag	taagcgac
O. Cun	gcagccac	gtaagtcgacgg...568...tgggcaaaatgtttctaagg	TTTAaACCTATCC	tcccctcctctttag	taagcgac
C. Fam	gcagccac	gtaagtggacgg...578...tgggcaaaatgtttctaagg	TTTAaACCTATCC	tcccctcctctttag	taagcgac
B. Tau	gcagccac	gtaagtagacag...587...tgggcagaatgtttctgagg	TTTAaACCTATCC	tcccctcctctttag	taagcgac
E. Cab	gcagccac	gtaagtagacgg...601...tgggcaaaatgtttctaagg	TTTAaACCTATCC	tcccctcctctttag	taagcgac
L. Afr	gcagccac	gtaagtagaaca...902...tgggcaaaatgtctcaagg	TTTAaACCTATCC	tcccctcctctttag	taagcgac
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id=547629 gene=ENSG00000085978 name=ATG16L1 segment=chr2.234181699_234182366.1 type=AN

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R. Mac	atccttGG	GTAGGTTAGA	agacctttccttttaaaaat...172...ctttccctttag	tctgtccg
P. Tro	atccttGG	GTAGGTTAGA	agacctttccttttaaatg...171...ctttccctttag	tctgtccg
P. Abe	atccttGG	GTAGGTTAGA	agacctttccttttaaaaat...172...ctttccctttag	tctgtccg
C. Jac	atccttGG	GTAGGTTAGA	agacctttcaccttcctttt...177...ctttccctttag	tctgtccg
M. Mus	atccttGG	GTAGGTTAGA	agacctttcacctttcctttt...169...ctttccctttag	tctgtccg
R. Nor	atccttGG	GTAGGTTAGA	agacctttcacctttcctttt...168...ctttccctttag	tctgtccg
C. Por	atccttGG	GTAGGTTAGA	agacctttcgtttttaaaaat...165...ctctccctttag	tctgtccg
O. Cun	atccttGG	GTAGGTTAGA	agacctttcacctttcctttt...175...ctctccctttag	tctgtccg
C. Fam	atccttGG	GTAGGTTAGA	aaacctttcacctttccttgt...178...ttacctttag	tctgtccg
B. Tau	atccttGG	GTAGGTTAGA	aaacctttcacctttccttgt...186...cttacctttag	tctgtccg
E. Cab	atccttGG	GTAGGTTAGA	aaacctttcgcttcccttgt...177...ctgactcttag	tctgtccg
L. Afr	atccttGG	GTAGGTTAGA	aaacattcgcttgcctttag...174...ctttccctttag	tctgtccg
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id=547632 gene=ENSG00000085978 name=ATG16L1 segment=chr2.234182424_234182636.1 type=IN VIEW

Figure 61: CS=13



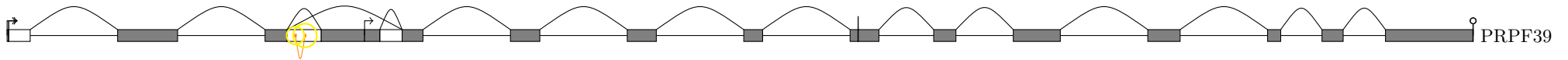
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R. Mac	-acaacaa	gggagaagagtg...205	-----gcttgtggtgttgatgactt--	TCTG	TTTCTGTTTGTAA	aattatttgctaagcatatt----	.336	..aatatttacct	aatatctg			
P. Tro	-acaacaa	gggagaagagtg...205	-----gcttgtggagtgtgatgactt--	TCTG	TTTCTGTTTGTAA	aattatttgctaagcatatt----	.337	..aatatttacct	aatatctg			
P. Abe	-acaacaa	gggagaagagtg...205	-----gcttgtggtgttgatgactt--	TCTG	TTTCTGTTTGTAA	aattatttgctaagcatatt----	.337	..aatatttacct	aatatctg			
C. Jac	-acaacaa	gggagaagagtg...205	-----gcttccgggtgttgatgactt--	TCTG	TTTCTGTTTGTAA	aattatttgctaagcatatt----	.331	..aatatttacct	aatatctg			
M. Mus	-ctggacag	aggagaagcgca...217	-----attggagcatgt-ttacggat--	GACG	TCTG	TTTCTGTTTGTAA	aattatttgctaagtgatt----	.352	..aatatttacct	aatatctg		
C. Por	-gtggacaa	aagagagagcga...188	-----ggagccttgtggtgtgtagat	GACG	TCTG	TTTCTGTTTGTAA	aattatttcgtaagcgatt----	.337	..aatatttacct	aacagctg		
O. Cun	-acaagga	gggagaagagtg...193	-----ttggagccttgtggtgtcaat--	GACG	TCTG	TTTCTGTTTGTAA	aattatttcgtaagcatat----	.336	..aatatttacct	aatatctg		
C. Fam	-gggagggg	ggaagaagagtg...181	..ctgcttcattttggagcctg--	TGGT	TGGA	GACG	TCTG	TTTCTGTTTGTAA	aattatttgtaagcatatt----	.333	..aatatttacct	aatatctg
B. Tau	-acaaagt	gggagagagtgt...188	-----atattggagccttgtggtgtt--	GACG	TCTG	TTTCTGTTTGTAA	AATT	atttgtaagcatatttttc	.326	..aatatttacct	aatacctg	
E. Cab	gacggatg-	gggagaagagtg...188	-----tcattttggagccttgtcctg--	TGGA	GACG	TCTG	TTTCTGTTTGTAA	aattatttgtaagtgatt----	.328	..aatatttacct	aatatctg	
S. Sus	-acaagcg	gggagagaaggg...185	..ctgcttcattttggagcctg--	TGGT	TGGA	gACG	TCTG	TTTCTGTTTGTAA	aattattcgtaaaagcgtc----	.299	..aatatttacct	aatatctg
L. Afr	-acaataa	gggagaagagtg...191	-----atattggagccttgtagtgtt--	GACA	TCTG	TTTCTGTTTGTAA	aattatttgtaagcgatt----	.333	..aatatttacct	aataacag		
		***	***	**	****	*****	*****	* **	*	*****	** * * *	

id=201533 gene=ENSG00000142871 name=CYR61 segment=chr1.86048764.86049386.1 type=E3

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R. Mac	-acaacaa	gggagaagagtg...419	---cagctatctgcactctaaac-	TGCAAACAGAAA	CAGG	gttttaagactgaatgttt-----	.122	..aatatttacct	aatatctg	
P. Tro	-acaacaa	gggagaagagtg...420	---cagctatctgcactctaaac-	TGCAAACAGAAA	CAGG	gttttaagactgaatgttt-----	.122	..aatatttacct	aatatctg	
P. Abe	-acaacaa	gggagaagagtg...420	---cagctatctgcactctaaaa-	TGCAAACAGAAA	CAGG	gttttaagactgaatgttt-----	.122	..aatatttacct	aatatctg	
C. Jac	-acaacaa	gggagaagagtg...414	---cagctaactgcactctaaac-	TGCAAACAGAAA	CAGG	gttttaagactgaatgttt-----	.122	..aatatttacct	aatatctg	
M. Mus	-ctggacag	aggagaagcgca...450	---agctacctgcactctaana-	TGCAAACAGAAA	CAGG	TGTTtaagattgaatgtttttt-----	.120	..aatatttacct	aatatctg	
C. Por	-gtggacaa	aagagagagcga...407	---cagctacctgcactct-aaac	TGCAAACAGAAA	CAGG	TGTTctaagactgaatgtttttat-----	.119	..aatatttacct	aacagctg	
O. Cun	-acaagga	gggagaagagtg...411	---agctacctgcactctacaca-	GC	AAACAGAAA	CAGG	TGTTtaagattgaatgtttttat-----	.119	..aatatttacct	aatatctg
C. Fam	-gggagggg	ggaagaagagtg...406	---cagctatctgcactctaaac-	TGCAAACAGAAA	CAGG	TGTTTAAgACTG	aatgtttttatttatcaaaa	.110	..aatatttacct	aatatctg
B. Tau	-acaaagt	gggagagagtgt...397	..aggcagctatctgcactcta-	AAT	TGCAAACAGAAA	CAGG	TGTTtaagactgaatgtttttat-----	.119	..aatatttacct	aatacctg
E. Cab	gacggatg-	gggagaagagtg...403	---gcagctatctg-gctctgaac-	TGCAAACAGAAA	CAGG	TGTTTAAgactgaatgtttttatttat-----	.115	..aatatttacct	aatatctg	
S. Sus	-acaagcg	gggagagaaggg...374	---cagctatctgcactcgaaac-	TGCAAACAGAAA	CAGG	TGTTTAAgACTG	aatgtttttatttatcaaaa	.110	..aatatttacct	aatatctg
L. Afr	-acaataa	gggagaagagtg...405	---cagctatctgcactctaaac-	TGCAAACAGAAA	CAGG	TGTTtaagactgaatgtttttat-----	.120	..aatatttacct	aataacag	
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id=201533 gene=ENSG00000142871 name=CYR61 segment=chr1.86048764.86049386.1 type=E3 VIEW

Figure 62: CS=7.8



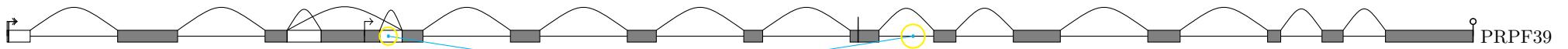
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R. Mac	cagatgag	gtg	gtcgtacatcactgaataaacttatctccaa	TAGGTA	AGCCAA	attaataacaaaacaaagatt-...107...ctttgttggcag	gtgcg	gta
P. Tro	cagatgag	gtg	gtcgtacatcactgaataaacttatctccaa	TAGGTA	AGCCAA	attaataacaaaacaaagatt-...112...ctttgttggcag	gtgcg	gta
P. Abe	cagatgag	gtg	gtcgtacatcactgaataaacttatctccaa	TAGGTA	AGCCAA	attaataacaaaacaaagaat-...117...ctttgttggcag	gtgcg	gta
C. Jac	cagatgag	gtg	gtcgtacatcactgaataaacttatctccaa	TAGGTA	AGCCAA	attaataacaaaacaaagatt-...103...ctttgttggcag	gtgcg	gta
M. Mus	cagatgag	gtg	gtcgtacatcaatgaatacagttttctctgt	TAGGTA	AGCCAA	attaataacaaaaca--gactc...105...ctttgttggcag	gtgcg	gta
R. Nor	cagatgag	gtg	gtcgtatataatgaatacagttttctctgt	TAGGTA	AGCCAA	attaataacaaaaca--gactt...105...ctttgttggcag	gtgcg	gta
C. Por	cagatgag	gtg	gtcgtacatcactgaataaacttatctttat	TAGGTA	AGCCAA	attaataacaaaacaagactt-...101...ctttgttggcag	gtgcg	gta
C. Fam	cagatgag	gtg	gtcgtacattactgaataaaattatctccat	TAGGTA	AGCCAAA	taataacgaacaaaatttt...112...ctttgttggcag	gtgcg	gta
F. Cat	cagatgag	gtg	gtcgtacattactgaataaaattgtctccat	TAGGTA	AGCCAAA	taataacaaaacaagactt...104...ctttgttggcag	gtgcg	gta
B. Tau	cagatgag	gtg	gtcgtacattactgaataaaattatctccat	TAGGTA	AGCCAAA	taataacaaagcaagactt...104...ctttgttggcag	gtgcg	gta
E. Cab	cagatgag	gtg	gtcgtacatcactgaataaacttatctctgt	TAGGTA	AGCCAAA	taatagcaaaatgaagagt...100...ctttgttggcag	gtgcg	gta
S. Sus	cagatgag	gtg	gtcgtacattactgaataaacttatctccat	TAGGTA	AGCCAAA	atgatacaaaagcaagactt...100...ctttgttggcag	gtgcg	gta
L. Afr	cagatgag	gtat	gtacaacactgaataaacttatctccat	TAGGTA	AGCCAAA	taacaacaaaacaacacct...104...ctttgttggcag	gtgcg	gta
*****	**	***	* * ***** * * * * *	*****	*****	* * * * *	*****	*****

id=361786 gene=ENSG00000185246 name=PRPF39 segment=chr14_45565432_45565626_1 type=AN

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P. Tro	cagatgag	gtg	gtcgtacatca...52...-----agattTTTTTTTTTTTTTTT	TTGGCT	GCAGTACCTA	ccatttatggtcaacaatt...60...ctttgttggcag	gtgcg	gta
P. Abe	cagatgag	gtg	gtcgtacatca...57...-----tTTTTTTTTTTTTTTTTTT	TTGGCT	GCAGTACCTA	ccatttatggtcaacaatt...60...ctttgttggcag	gtgcg	gta
C. Jac	cagatgag	gtg	gtcgtacatca...43...-----acaaaacaaagattTTTTTTT	TTGGCT	GCAGTACCTA	cctttttggtcaacaatt...60...ctttgttggcag	gtgcg	gta
M. Mus	cagatgag	gtg	gtcgtacatca...44...-----caaacagactcTTTTTTT	TTGGCT	GCAGTACCTA	ccatttatggtgaacattt...61...ctttgttggcag	gtgcg	gta
R. Nor	cagatgag	gtg	gtcgtatataca...44...-----caaacagactttcTTTTT	TTGGCT	GCAGTACCTA	ccatttatggtcaaacattt...61...ctttgttggcag	gtgcg	gta
C. Por	cagatgag	gtg	gtcgtacatca...40...atacaaac--aagactTTTTT	TTGGCT	GCAGTACCTA	ccatttatggtcaacaatt...61...ctttgttggcag	gtgcg	gta
C. Fam	cagatgag	gtg	gtcgtacatta...52...-----aattTTTTTTTTTTTTTTT	TTGGCT	GCAGTACCTA	cgatttatggtcaacaatt...60...ctttgttggcag	gtgcg	gta
F. Cat	cagatgag	gtg	gtcgtacatta...44...-----caaacaaagactTTTTTTT	TTGGCT	GCAGTACCTA	cgatttatggtcaacaatt...60...ctttgttggcag	gtgcg	gta
B. Tau	cagatgag	gtg	gtcgtacatta...44...-----caagcaagactTTTTTTT	TTGGCT	GCAGTACCTA	cgatttatggtcaacaatt...60...ctttgttggcag	gtgcg	gta
E. Cab	cagatgag	gtg	gtcgtacatca...40...atagcaaatgaagattTTT	TTGGCT	GCAGTACCTA	cgatttatggtcaacaatt...60...ctttgttggcag	gtgcg	gta
S. Sus	cagatgag	gtg	gtcgtacatta...40...atacaaac--aagactTTTTT	TTGGCT	GCAGTACCTA	cgatttatggtcgaacaatt...60...ctttgttggcag	gtgcg	gta
L. Afr	cagatgag	gtat	gtacaaca...44...-----caaacaaacacctTTTTTTT	TTGGCT	GCAGTACCTA	ccatttatggtcaacaatt...60...ctttgttggcag	gtgcg	gta
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id=361786 gene=ENSG00000185246 name=PRPF39 segment=chr14_45565432_45565626_1 type=AN VIEW

Figure 63:



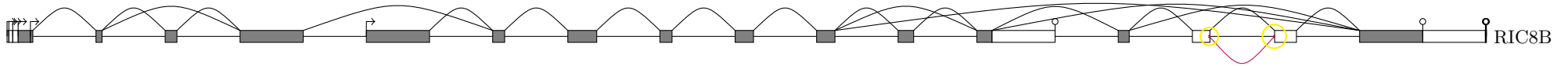
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P. Tro	cccaaatg	gtaatgtagattat	ttaacaaaattccagta	ATTAGta	TTTCTAAGGtt	caccggataacacagtgt...47...ttttcttcttag	gtttatcg
P. Abe	cccaaatg	gtaatgtagattat	ttaacaaaattccagta	ATTAGta	TTTCTAAGGtt	caccggataacacagtgt...47...ttttcttcttag	gtttatcg
C. Jac	cccaaatg	gtaatgtagattat	ttaacaaaattccagta	ATTAGta	TTTCTAAGGtt	caccggataacacagtgt...47...ttttcttcttag	gtttatcg
M. Mus	cccaaatg	gtaatgtagattat	ttaacaaaattccagta	ATTAGta	TTTCTAAGGtt	caccggataacacagtgt...47...ttttcttcttag	gtttatcg
R. Nor	cccaaatg	gtaatgtagattat	ttaacaaaattccagta	ATTAGta	TTTCTAAGGtt	caccggataacacagtgt...47...ttttcttcttag	gtttatcg
C. Por	cccaaatg	gtaatgtagattat	ttaacaaaattccagta	ATTAGta	TTTCTAAGGtt	caccggataacacagtgt...47...ttttcttcttag	gtgtatcg
O. Cun	cccaaatg	gtaatgtagattat	ttaacaaaattccagta	ATTAGta	TTTCTAAGGtt	caccggataacacagtgt...47...ttttcttcttag	gtttatcg
C. Fam	cccaaatg	gtaatgtagattat	ttaacaaaattccagta	ATTAGta	TTTCTAAGGtt	caccggataacacagtgt...47...ttttcttcttag	gtgtatcg
B. Tau	cccaaatg	gtaatgtagattat	ttaacaaaattccagta	ATTAGta	TTTCTAAGGtt	caccggataacacagtgt...47...ttttcttcttag	gtgtatcg
E. Cab	cccaaatg	gtaatgtagattat	ttaacaaaattccagta	ATTAGta	TTTCTAAGGtt	caccggataacacagtgt...47...ttttcttcttag	gtgtatcg
S. Sus	cccaaatg	gtaatgtagattat	ttaacaaaattccagta	ATTAGta	TTTCTAAGGtt	caccggataacacagtgt...47...ttttcttcttag	gtgtatcg
L. Afr	cccaaatg	gtaatgtagattat	ttaacaaaattccagta	ATTAGta	TTTCTAAGGtt	caccggataacacagtgt...47...ttttcttcttag	gtttatcg
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R. Mac	ggattaag	gtaagaaataa...	148...--cgttgccctctcttcgctcctt	CCTTAc	GAAACTAGT	ctagtggttcaataaagggtg...85...ttctgtatgtag	tatgccaa
P. Tro	ggattaag	gtaagaaatca...	148...--cgttgccctctcttcgctcctt	CCTTAc	GAAACTAGT	ctagtggttcaataaagggtg...85...ttctgtatgtag	tatgccaa
P. Abe	ggattaag	gtaagaaatca...	148...--cgttgccctctcttcgctcctt	CCTTAc	GAAACTAGT	ctagtggttcaataaagggtg...85...ttctgtatgtag	tatgccaa
C. Jac	ggattaag	gtaagaaatca...	146...--cgttgccctctcttcgctcctt	CCTTAc	GAAACTAGT	ctagtggttcaataaagggtg...85...ttctgtatgtag	tatgccaa
M. Mus	ggattaag	gtaagaaatga...	148...--cgttgccctctcttcgctcctt	CCTTAc	GAAACTAGT	ctagtggttcaataaagggtg...89...tttgtatgtag	tatgccaa
R. Nor	ggattaag	gtaagaaaacta...	149...--cgttgccctctcttcgctcctt	CCTTAc	GAAACTAGT	ctagtggttcaataaagggtg...89...ttctgtatgtag	tatgccaa
C. Por	ggattaag	gtaagaaatca...	147...ctcgttgccctctc--cgtcctt	CCTTAc	GAAACTAGT	ctagtggttcaataaagggtg...85...ttctgtatgtag	tacgccaa
O. Cun	ggatcaag	gtaagcaaattc...	148...--cgttgccctctcttcgctcctt	CCTTAc	GAAACTAGT	ctagtggttcaataaagggtg...85...ttctgtatgtag	tatgccaa
C. Fam	ggattaag	gtaagaaaatta...	148...--cgttgccctctcttcgctcctt	CCTTAc	GAAACTAGT	ctagtggttcaataaagggtg...86...ttctgtatgtag	tatgccaa
B. Tau	ggattaag	gtaagttaaatta...	146...ctcgttgccctctc--cgtcctt	CCTTAc	GAAACTAGT	ctagtggttcaataaagggtg...86...ttctgtatgtag	tatgccaa
E. Cab	ggattaag	gtaagaaaatta...	148...--cgttgccctctcttcgctcctt	CCTTAc	GAAACTAGT	ctagtggttcaataaagggtg...85...ttctgtatgtag	tatgccaa
S. Sus	ggattaag	gtaagaaaatta...	148...--cgttgccctctcttcgctcctt	CCTTAc	GAAACTAGT	ctagtggttcaataaagggtg...86...ttctgtatgtag	tatgccaa
L. Afr	ggattaag	gtaaaatfatat...	144...--cgttgccctctcttcgctcctt	CCTTAc	GAAACTAGT	ctagtggttcaataaagggtg...86...ttctgtatgtag	tatgccaa
**** *	**** *	*****	*****	*****	*****	*****	** **** **

id=361801 gene=ENSG00000185246 name=PRPF39 segment=chr14_45578984_45579296_1 type=IN VIEW

Figure 64:



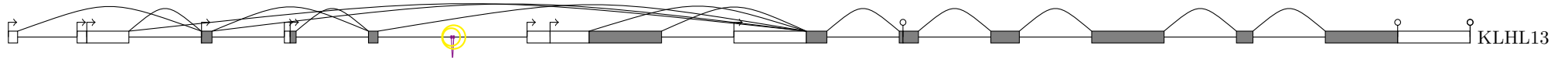
H.Sap	cattacag	accctgtcatta...87...atcaagctaagtggaagcg	GGAAgc	TGAAACTCGT	ATAG	GtaAATTc
R.Mac	cattacag	accctgtcatta...87...atcaagctaagtggaagcg	GGAAgc	TGAAACTCGT	ATAG	GtaAATTc
P.Tro	cattacag	accctgtcatta...87...atcaagctaagtggaagcg	GGAAgc	TGAAACTCGT	ATAG	GtaAATTc
P.Abe	cattacag	accctgtcatta...87...atcaagctaagtggaagcg	GGAAgc	TGAAACTCGT	ATAG	GtaAATTc
C.Jac	cattacag	accctgtcatta...87...atcaagctaagtggaagcg	GGAAgc	TGAAACTCGT	ATAG	GtaAATTc
M.Mus	cattacag	accctgtcatta...85...atcaagctaagtggaagcg	GGAAgc	TGAAACTCGT	ATAG	GtaAATTc
R.Nor	cattacag	accctgtcatta...94...accaagctaagtggaagcg	GGAAgc	TGAAACTCGT	ATAG	GtaAATTc
C.Por	cattacag	accctgtcatta...87...atcaagctaagtggaagcg	GGAAgc	TGAAACTCGT	atag	gtaaatc
O.Cun	cattacag	accctgtcatta...87...atcaagctaagtggaagcg	GGAAgc	TGAAACTCGT	ATAG	GtaAATTc
C.Fam	cattacag	accctgtcatta...87...atcaagctaagtggaagcg	GGAAgc	TGAAACTCGT	ATAG	GtaAATTc
F.Cat	cattacag	accctgtcatta...87...atcaagctaagtggaagcg	GGAAgc	TGAAACTCGT	ATAG	GtaAATTc
B.Tau	cattacag	accctgtcatta...87...atcaagctaagtggaagcg	GGAAgc	TGAAACTCGT	ATAG	GtaAATTc
E.Cab	cattacag	accctgtcatta...86...atcaagctaagtggaagcg	GGAAgc	TGAAACTCGT	ATAG	GtaAATTc
O.Avi	cattacag	accctgtcatta...87...atcaagctaagtggaagcg	GGAAgc	TGAAACTCGT	ATAG	GtaAATTc
L.Afr	cattacag	accctgtcatta...87...atcaagctaagtggaagcg	GGAAgc	TGAAACTCGT	ATAG	GtaAATTc
		*****	*****	*	*****	*****

id=209308 gene=ENSG00000111785 name=RIC8B segment=chr12_107272765_107272903_1 type=AN

H.Sap	tcgtatag	gtaaattcgaag...591...cttatcgtttagtaagatca	AATTTCTAa	ATGA	GTTTCGTTCC	ag	ttgaacat
R.Mac	tcgtatag	gtaaattcgaag...589...cttatcgtttagtaagatca	AATTTCTAa	ATGA	GTTTCGTTCC	ag	ttgaacat
P.Tro	tcgtatag	gtaaattcgaag...592...cttatcgtttagtaagatca	AATTTCTAa	ATGA	GTTTCGTTCC	ag	ttgaacat
P.Abe	tcgtatag	gtaaattcgaag...591...cttatcgtttagtaagatca	AATTTCTAa	ATGA	GTTTCGTTCC	ag	ttgaacat
C.Jac	tcgtatag	gtaaattcgaag...593...cttatcgtttagtaagatca	AATTTCTAa	ATGA	GTTTCGTTCC	ag	ttgaacat
M.Mus	tcgtatag	gtaaattcgaag...600...cttatcgtttagtaagatca	AATTTCTAa	ATGA	GTTTCGTTCC	ag	ttgaacat
R.Nor	tcgtatag	gtaaattcgaag...584...cttatcgtttagtaagatca	AATTTCTAa	ATGA	GTTTCGTTCC	ag	ttgaacat
C.Por	tcgtatag	gtaaattcgaag...552...-----tagtaagatcaaatttccaa	ATGA	GTTTCGTTCC	ag	ttgaacat	
O.Cun	tcgtatag	gtaaattcgaag...603...cttatcgtttagtaagatca	AATTTCTAa	ATGA	GTTTCGTTCC	ag	ttgaacat
C.Fam	tcgtatag	gtaaattcgaag...603...cttatcgtttagtaagatca	AATTTCTAa	ATGA	GTTTCGTTCC	ag	ttgaacat
F.Cat	tcgtatag	gtaaattcgaag...595...cttatcgtttagtaagatca	AATTTCTAa	ATGA	GTTTCGTTCC	ag	ttgaacat
B.Tau	tcgtatag	gtaaattcgaag...588...cttatcgtttagtaagatca	AATTTCTAa	ATGA	GTTTCGTTCC	ag	ttgaacat
E.Cab	tcgtatag	gtaaattcgaag...593...cttatcgtttagtaagatca	AATTTCTAa	ATGA	GTTTCGTTCC	ag	ttgaacat
O.Avi	tcgtatag	gtaaattcgaag...588...cttatcgtttagtaagatca	AATTTCTAa	ATGA	GTTTCGTTCC	ag	ttgaacat
L.Afr	tcgtatag	gtaaattcgaag...587...cttatcgtttagtaagatca	AATTTCTAa	ATGA	GTTTCGTTCC	ag	ttgaacat
		*****	*****	*	*****	*****	*****

id=209309 gene=ENSG00000111785 name=RIC8B segment=chr12_107272904_107273552_1 type=IN VIEW

Figure 65:



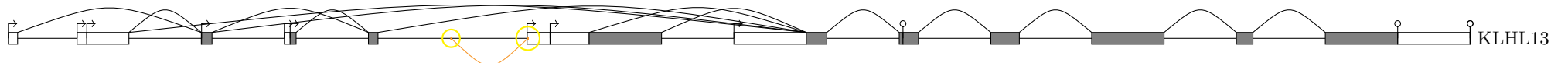
H. Sap	acttcagg	gtatgtccagg	g...4931...	ggcagta-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
P. Tro	acttcagg	gtatgtccagg	g...4931...	ggcagta-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
P. Abe	acttcagg	gtatgtccagg	g...4931...	ggcagta-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
C. Jac	acctcggg	gtatgtccagg	g...4931...	ggcagca-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
M. Mus	gctgcagg	gtatgtccaagg	g...4931...	ggcagta-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
R. Nor	gctgcagg	gtatgtccaagg	g...4931...	ggcagta-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
C. Por	acttcagg	gtatgtccaagg	g...4931...	ggcagta-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
O. Cun	acttcagg	gtatgtccaagg	g...4931...	ggcagca-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
C. Fam	actccagg	gtatgtccaagg	g...4931...	ggcagca-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
F. Cat	acttcagg	gtatgtccaagg	g...4932...	nnnnnnn-nngaattagattg	TTGATAGCGT	CCTCtGAGGac	TGCT	ATTAAgag
B. Tau	acttcagg	gtatgtgtaagg	g...4931...	ggcagca-ctgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
E. Cab	acttcagg	gtatgtccaagg	g...4931...	ggcagca-ttgaattagattg	TTGATAGCGtc	CCCTCtGAGGac	TGCT	ATTAAgag
S. Sus	acttcagg	gtatgttcaagg	g...4931...	ggcagcc-ctgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
L. Afr	acttcagg	gtatgtctgagg	g...4931...	gcagcattgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
	*	* * *	*****	**	*****	****	****	****

id=714510 gene=ENSG0000003096 name=KLHL13 segment=chrX_117107702_117117442_-1 type=IN

H. Sap	acttcagg	gtatgtccagg	g...4931...	ggcagta-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
P. Tro	acttcagg	gtatgtccagg	g...4931...	ggcagta-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
P. Abe	acttcagg	gtatgtccagg	g...4931...	ggcagta-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
C. Jac	acctcggg	gtatgtccagg	g...4931...	ggcagca-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
M. Mus	gctgcagg	gtatgtccaagg	g...4931...	ggcagta-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
R. Nor	gctgcagg	gtatgtccaagg	g...4931...	ggcagta-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
C. Por	acttcagg	gtatgtccaagg	g...4931...	ggcagta-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
O. Cun	acttcagg	gtatgtccaagg	g...4931...	ggcagca-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
C. Fam	actccagg	gtatgtccaagg	g...4931...	ggcagca-ttgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
F. Cat	acttcagg	gtatgtccaagg	g...4932...	nnnnnnn-nngaattagattg	TTGATAGCGT	CCTCtGAGGac	TGCT	ATTAAgag
B. Tau	acttcagg	gtatgtgtaagg	g...4931...	ggcagca-ctgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
E. Cab	acttcagg	gtatgtccaagg	g...4931...	ggcagca-ttgaattagattg	TTGATAGCGtc	CCCTCtGAGGac	TGCT	ATTAAgag
S. Sus	acttcagg	gtatgttcaagg	g...4931...	ggcagcc-ctgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
L. Afr	acttcagg	gtatgtctgagg	g...4931...	gcagcattgaattagattg	TTGATAGCGtc	CCTCtGAGGac	TGCT	ATTAAgag
	*	* * *	*****	**	*****	****	****	****

id=714510 gene=ENSG0000003096 name=KLHL13 segment=chrX_117107702_117117442_-1 type=IN VIEW

Figure 66: CS=8.4



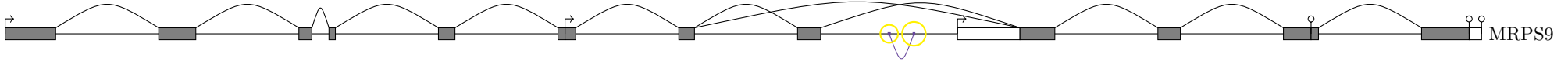
H. Sap	acttcagg	gtatgtccaggg...4931...	ggcagta-ttgaattagattg	TTGATAGCGTCC	ctctgaggactgct	attaagag
P. Tro	acttcagg	gtatgtccaggg...4931...	ggcagta-ttgaattagattg	TTGATAGCGTCC	ctctgaggactgct	attaagag
P. Abe	acttcagg	gtatgtccaggg...4931...	ggcagta-ttgaattagattg	TTGATAGCGTCC	ctctgaggactgct	attaagag
C. Jac	acctcggg	gtatgtccaggg...4931...	ggcagca-ttgaattagattg	TTGATAGCGTCC	ctctgaggactgct	attaagag
M. Mus	gctgcagg	gtatgtccaagg...4931...	ggcagta-ttgaattagattg	TTGATAGCGTCC	ctctgaggactgct	attaagag
R. Nor	gctgcagg	gtatgtccaagg...4931...	ggcagta-ttgaattagattg	TTGATAGCGTCC	ctccgaggactgct	attaagag
C. Por	acttcagg	gtatgtccaagg...4931...	ggcagta-ttgaattagattg	TTGATAGCGTCC	ctctgaggactgct	attaagag
O. Cun	acttcagg	gtatgtccaagg...4931...	ggcagca-ttgaattagattg	TTGATAGCGTCC	ctctgaggactgct	attaagag
C. Fam	actccagg	gtatgtccaagg...4931...	ggcagca-ttgaattagattg	TTGATAGCGTCC	ctccgaggactgct	attaagag
F. Cat	acttcagg	gtatgtccaagg...4932...	nnnnnnn-nngaattagattg	TTGATAGCGTCC	-tccgaggactgct	attaagag
B. Tau	acttcagg	gtatgtgtaagg...4931...	ggcagca-ctgaattagattg	TTGATAGCGTCC	ctccgaggactgct	attaagag
S. Sus	acttcagg	gtatgttcaagg...4931...	ggcagcc-ctgaattagattg	TTGATAGCGTCC	ctccgaggactgct	attaagag
L. Afr	acttcagg	gtatgtctgagg...4931...	-gcagcatttgaattagattg	TTGATAGCGTCC	ctccgaggactgct	attaagag
	*	* **	*****	**	*****	** *****

id=714510 gene=ENSG0000003096 name=KLHL13 segment=chrX.117107702.117117442_-1 type=IN

H. Sap	gGACTGCT	ATTAA	gagcatgctactctgtactt...122...	ctagaagaacct	gcagagtt
P. Tro	gGACTGCT	ATTAA	gagcatgctactctgtactt...122...	ctagaagagcct	gcagagtt
P. Abe	gGACTGCT	ATTAA	gagcatgctactctgtactt...122...	ctagaagagcct	gcagagtt
C. Jac	gGACTGCT	ATTAA	gagcatgctactctgtactt...122...	ctagaagagcgt	gcagagtt
M. Mus	gGACTGCT	ATTAA	gagcacgctattctgtactt...122...	ctagaggagcgc	gcagagtt
R. Nor	gGACTGCT	ATTAA	gagcgcgctattctgtactt...122...	ctagaggagcgc	gcagagtt
C. Por	gGACTGCT	ATTAA	gagcatgctattctgtactt...122...	ctagaagagcgt	gcagagtt
O. Cun	gGACTGCT	ATTAA	gagcacgctactctgtactt...122...	ctagaagagcgt	gcagagtt
C. Fam	gGACTGCT	ATTAA	gagcacgctactctgtactt...127...	ctagaagaacct	gcagagtt
F. Cat	gGACTGCT	ATTAA	gagcacactactctgtgctc...119...	ctagaagagcgg	gcagagtt
B. Tau	gGACTGCT	ATTAA	gagcatgctattctgtactt...125...	ctggaagagcgt	gcagagtt
S. Sus	gGACTGCT	ATTAA	gagcacgctattctgtactt...124...	ctagaagagcgt	gcagagtt
L. Afr	gGACTGCT	ATTAA	gagcatgctattctgtactt...122...	ctagaagagcgt	gcagagtt
	*****	*****	** *****	** *****	*****

id=714511 gene=ENSG0000003096 name=KLHL13 segment=chrX.117107543.117107701_-1 type=AN VIEW

Figure 67: CS=3.9



```

H.Sap --taccctag gtagctgagat---.285...ggcttctaattttaaaggggtTAATtcCAAGTTGTTTActttctaatacacatggttcaa-----..298...---cacttgaagatc atctaaat
R.Mac --taccctag gtagctaaatgt---.285...ggcttctaattttaaaggggtTAATtcCAAGTTGTTTActttctaatacacatggttcaa-----..298...---cacttgaagatc atctaaat
P.Tro --taccctag gtagctgagat---.285...ggcttctaattttaaaggggtTAATtcCAAGTTGTTTActttctaatacacatggttcaa-----..298...---cacttgaagatc atctaaat
P.Abe --taccctag gtagctgagtg---.285...ggcttctaattttaaaggggtTAATtcCAAGTTGTTTActttctaatacacatggttcaa-----..298...---cacttgaagatc atctaaat
C.Jac --tatcatag gtagctgagtg---.282...ggcttctaattttaaaggggtTAATtcCAAGTTGTTTActttctaatacacatggttcaa-----..299...---cacttgaagatc atctaaat
M.Mus --ggtcacag gtagttaggttc---.292...ggcttctaattttaaaggggtTAATtcCAAGTTGTTTActttctaatacacatggttcaa-----..294...---cacttgaagatc atctaaat
R.Nor ggtgtc---tagcagcgtgcca...300...ggcttctaattttaaaggggtTAATtcCAAGTTGTTTActttctaatacacatggttcaa-----..291...atactttgaaag--- atctaaat
C.Por --gggccgaa ggggc---gtatgtc...275...-----taattttaaaggggttaatacCAAGTTGTTTACTTtcTAATcacatggttcaagaactatta...286...---tgcttgaaaatc atctaaat
O.Cun --ggccatgg ---gttcatttctcc...271...ggcttctaattttaaaggggtTAATtcCAAGTTGTTTActtctctaatacacatggttcaa-----..295...---cacttgaagatc atctaaat
C.Fam --tactgtag gtggcgaagtct---.284...ggtgtctaattttaaaggggtTAATtcCAAGTTGTTTActttctaatacacatggttca-----..297...---cacttgaagatc atctaaat
B.Tau --caggctgg gtgcctaagtat---.271...tgctgctaattttaaaggggtTAATtcCAAGTTGTTTActttctaatacacatggttga-----..298...---cactcaagatc atctaaat
E.Cab --tcgcgtag gtggctaagtat---.281...-----taattttaaaggggttaatacCAAGTTGTTTACTTtcTAATcacatggttcaagaactatta...289...---cacttgaagatt atctaaat
O.Avi --caggttgg gtgcctaagtat---.275...ggcttctaattttaaaggggtTAATtcCAAGTTGTTTActttctaatacacatggttcaa-----..298...---cactcaagatc atctaaat
L.Afr --tgcattag gcagt-aagcatt---.871...ggcttctaattttaaaggggtTAATtcCAAGTTGTTTActttctaatacacatggttcaa-----..297...---tactttgtgatc atctaaat
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```

id=82146 gene=ENSG00000135972 name=MRPS9 segment=chr2.105707892_105708555.1 type=IN

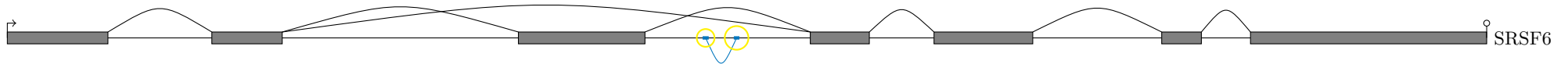
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R.Mac --taccctag gtagctaaatgt---.405...---tcaagatctcttgaat---TAA-ATAGCTTGATTGttcggttttaaaggaatca...180...---cacttgaagatc atctaaat
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M.Mus --ggtcacag gtagttaggttc---.412...---tcaagatctcttgaat---TAA-ATAGCTTGATTGttcggttttaaaggaatca...176...---cacttgaagatc atctaaat
R.Nor ggtgtc---tagcagcgtgcca...420...---tcaagatctcttgaat---TAA-ATAGCTTGATTGttcggttttaaaggaatca...173...atactttgaaag--- atctaaat
C.Por --gggccgaa ggggc---gtatgtc...429...ttttaaaggaatcataaacATAAAGTAAACACAGCTTG---aacagcaaaaatatattg...133...---tgcttgaaaatc atctaaat
O.Cun --ggccatgg ---gttcatttctcc...391...---tcaagatctcttgaat---TAA-ATAGCTTGATTGttcggttttaaaggaatca...177...---cacttgaagatc atctaaat
C.Fam --tactgtag gtggcgaagtct---.404...---tcaagatctcttgaat---TAA-ATAGCTTGATTGttcggttttaaaggaatca...179...---cacttgaagatc atctaaat
B.Tau --caggctgg gtgcctaagtat---.390...---tcaagatctcttgaat---TAA-ATAGCTTGATTGttcagttttaaaggaatca...181...---cactcaagatc atctaaat
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L.Afr --tgcattag gcagt-aagcatt---.992...---tcaagatctcttgaat---TAA-ATAGCTTGATTGttcggttttaaaggaatca...178...---tactttgtgatc atctaaat
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id=82146 gene=ENSG00000135972 name=MRPS9 segment=chr2.105707892_105708555.1 type=IN VIEW

Figure 68:



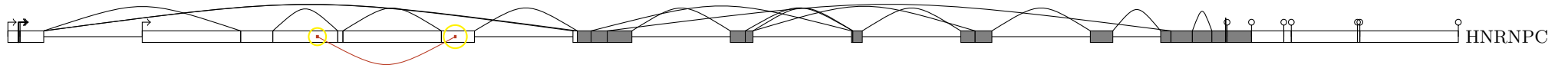
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R.Mac	actgtgat	gtaagtacttag...77...--aaataaaaacttagcgaggt	AAATcGAATaAAGGaGCAG	tcactctctaacagattgta...190...catgtgat-aaag	gtggtgga
P.Tro	actgtgat	gtaagtacttag...77...--aaataaaaacttagcgaggt	AAATcGAATaAAGGaGCAG	tcactctctaacagattgta...190...catgtgat-aaag	gtggtgga
P.Abe	actgtgat	gtaagtacttag...77...--aaataaaaacttagcgaggt	AAATcGAATaAAGGaGCAG	tcactctctaacagattgta...191...-atgtgataaaaag	gtggtgga
C.Jac	actgtgat	gtaagtacttag...75...gtaaaataaaaacttagcgag	GTAATTGAATaAAGGaGCAG	tcactctctaacagattgta...186...catgtgat-aaag	gtggtgga
M.Mus	actgtgat	gtaagtacttag...73...gtaaaataaaaacttagcgag	GTAATTGAATaAAGGaGCAG	tcactctctaacagattgta...185...catgtgat-aaag	gtggtgga
R.Nor	actgtgat	gtaagtacttag...73...gtaaaataaaaacttagcgag	GTAATTGAATaAAGGaGCAG	tcactctctaacagattgta...186...cgtgtgat-aaag	gtggtgga
C.Por	actgtgat	gtaagtacttag...73...gtaaaataaaaacttagcgag	GTAATTGAATaAAGGaGCAG	tcactctctaacagattgta...185...cgtgtgat-aaag	gtggtgga
O.Cun	actgtgat	gtaagtacttag...73...gtaaaataaaaacttagcgag	GTAATTGAATaAAGGaGCAG	tcactctctaacagattgta...188...cgtgtgat-aaag	gtggtggt
C.Fam	actgtgat	gtaagtacttag...73...gtaaaataaaaacttagcgag	GTAATTGAATaAAGGaGCAG	tcactctctaacagattgta...187...catgtgat-aaag	gtggtgga
F.Cat	actgtgat	gtaagtacttag...73...gtaaaataaaaacttagcgag	GTAATTGAATaAAGGaGCAG	tcactctctaacagattgta...187...catgtgat-aaag	gtggtgga
B.Tau	actgtgat	gtaagtacttag...73...gtaaaataaaaacttagcgag	GTAATTGAATaAAGGaGCAG	tcactctctaacagaatgta...189...cacatgat-aaag	gtggtgga
S.Sus	actgtgat	gtaagtacttag...73...gtaaaataaaaacttagcgag	GTAATTGAATaAAGGaGCAG	tcactctctaacagattgta...187...catgtgat-aaag	gtggtgga
O.Avi	actgtgat	gtaagtacttag...73...gtaaaataaaaacttagcgag	GTAATTGAATaAAGGaGCAG	tcactctctaacagaatgta...188...cacatgat-aaag	gtggtgga
*****	*****	*****	*****	*****	*****

id=92667 gene=ENSG00000124193 name=SRSF6 segment=chr20.42088061.42088410.1 type=IN

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R.Mac	actgtgat	gtaagtacttag...148...ttggatttagtc-tatttgac	TGCCCTTaATTaATTT	tatggcaaatcacaatgtg---...120...catgtgat-aaag	gtggtgga
P.Tro	actgtgat	gtaagtacttag...148...ttggatttagtc-tatttgac	TGCCCTTaATTaATTT	tatggcaaatcacaatgtg---...120...catgtgat-aaag	gtggtgga
P.Abe	actgtgat	gtaagtacttag...148...ttggatttagtc-tatttgac	TGCCCTTaATTaATTT	tatggcaaatcacaatgtg---...121...-atgtgataaaaag	gtggtgga
C.Jac	actgtgat	gtaagtacttag...148...ttggatttagtc-tatttgac	TGCCCTTaATTaATTTAT	-ggcaaatcgcgaatgtgtca...114...catgtgat-aaag	gtggtgga
M.Mus	actgtgat	gtaagtacttag...146...ttggatttagtc-tatttgac	TGCCCTTaATTaATTTGT	-ggcaaatcacaatgtatcg...113...catgtgat-aaag	gtggtgga
R.Nor	actgtgat	gtaagtacttag...147...-tggatatagtccttatttgac	TGCCCTTaATTaATTTGT	-ggcaaatcacaatgtatcg...113...cgtgtgat-aaag	gtggtgga
C.Por	actgtgat	gtaagtacttag...146...ttggatttagtg-tgtttgac	TGCCCTTaATTaATTTAT	-ggcaaatcacaatgtatcg...113...cgtgtgat-aaag	gtggtgga
O.Cun	actgtgat	gtaagtacttag...146...tcggatttagtc-tatttgac	TGCCCTTaATTaATTTAT	-ggcaaatcacaatgtatca...116...cgtgtgat-aaag	gtggtggt
C.Fam	actgtgat	gtaagtacttag...146...ttggatttagtc-tatttgac	TGCCCTTaATTaATTTAT	-ggcaaatcacaactgtatcg...115...catgtgat-aaag	gtggtgga
F.Cat	actgtgat	gtaagtacttag...146...ttggatttagtc-tatttgac	TGCCCTTaATTaATTTAT	-ggcaaatcacaactgtatcg...115...catgtgat-aaag	gtggtgga
B.Tau	actgtgat	gtaagtacttag...147...-tggtttagtcctgttttgac	TGCCCTTaATTaATTTAT	-ggcaaatcataactgtatcg...116...cacatgat-aaag	gtggtgga
S.Sus	actgtgat	gtaagtacttag...146...ttggatttagtc-tatttgac	TGCCCTTaATTaATTTAT	-ggcaaatcacaactgtatcg...115...catgtgat-aaag	gtggtgga
O.Avi	actgtgat	gtaagtacttag...147...-tggtttagtcctgttttgac	TGCCCTTaATTaATTTAT	-ggcaaatcataactgtatcg...115...cacatgat-aaag	gtggtgga
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id=92667 gene=ENSG00000124193 name=SRSF6 segment=chr20.42088061.42088410.1 type=IN VIEW

Figure 69:



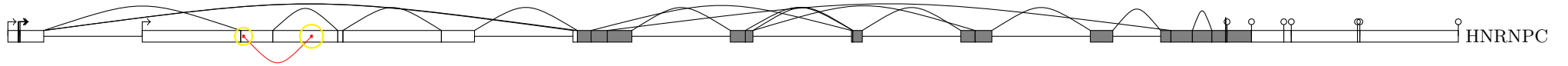
H. Sap	atgtacag	gtgtttttttt...179...-ctgctactgaaaac---tttacc	CTT-GcGGTTttTGTGG	aaactgcttttgaaagaga...71...gtttttttacag	tgagattt
R. Mac	atgtacag	gtgtttttttt...179...-ctgctactgaaaac---tttacc	CTT-GcGGTTttTGTGG	aaactgcttttgaaagaga...71...gtttttttacag	tgagattt
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P. Abe	atgtacag	gtgtttttttt...179...-ctgctactgaaaac---tttacc	CTT-GcGGTTttTGTGG	aaactgcttttgaaagaga...71...gtttttttacag	tgagattt
C. Jac	atgtacag	gtgtttttttt...178...-tctgctactgagaac---tt-atc	CTT-GcGGTTttTGTGG	aaactgcttttgaaagaga...71...gtttttttacag	tgagattt
M. Mus	acatacag	gtgtttttttt...190...-ctgctattgagaac---attacc	CTT-GcGGTTttTGTGG	aaactgcttttgaaagaga...70...gtttttttacag	tgagattt
R. Nor	acatacag	gtgtttttttt...194...-tatttgagaacattattacc	CTT-GcGGTTttTGTGG	aaactgcttttgaaagaga...70...gtttttttacag	tgagattt
C. Por	atttacag	gtgtttttttt...165...-tctgctactgagaac---attacc	CTT-GcGGTTttTGTGG	aaactgcttttgaaagaga...69...gtttttttacag	tgagattt
C. Fam	atttacag	gtgtttttttt...179...-ctgctactgagaac---tttacc	CTT-GcGGTTttTGTGG	aaactgcttttgaaagaga...71...gtttttttacag	tgagattt
F. Cat	atttacag	gtgtttttttt...179...-ctgctactgagaac---tttacc	CTT-GcGGTTttTGTGG	aaactgcttttgaaagaga...71...gtttttttacag	tgagattt
B. Tau	atttacag	gtgtttttttt...180...-ctgctactgagaac---ttcacc	CTT-GcGGTTttTGTGG	aaactgcttttgaaagaga...71...gtttttttacag	tgagattt
E. Cab	atttacag	gtgtttttttt...179...-ctgctactgagaac---tttacc	CTT-GcGGTTttTGTGG	aaactgcttttgaaagaga...70...gtttttttacag	tgagattt
O. Avi	atttacag	gtgtttttttt...181...-ctgctactgagaac---tttacc	CTT-GcGGTTttTGTGG	aaactgcttttgaaagaga...71...gtttttttacag	tgagattt
L. Afr	atgtgacag	gtgtttttttt...181...-ttgctactgagaac---tttacc	CTT-GcGGTTttTGTGG	aaactgcttttgaaagaga...71...gtttttttacag	tgagattt
	* * **	*** *****	*** ** * * **	*****	*****

id=74904 gene=ENSG0000092199 name=HNRNPC segment=chr14.21731496.21731825.-1 type=A5

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R. Mac	cctgaaag	ccatcttctcctgtttcccttgaaatcccatcctgcttttctgtac---actacccc---TCACAAACC	aCAAG	ctgcagcaacatggatgcc...66...tcctgggtgatg	gtaagagg
P. Tro	cctgaaag	ccatcttctcctgtttcccttgaaatcccatcctgcttttctgtac---actacccc---TCACAAACC	aCAAG	ctgcagcaacatggatgcc...66...tcctgggtgatg	gtaagagg
P. Abe	cctgaaag	ccatcttctcctgtttcccttgaaatcccatcctgcttttctgtac---actacccc---TCACAAACC	aCAAG	ctgcagcaacatggatgcc...66...tcctgggtgatg	gtaagagg
C. Jac	cctgaaag	ccatcttctcctgtttcccttgaaatcccatcctgcttttctgtac---actacccc---TCACAAACC	aCAAG	ctgcagcaacatggatgcc...66...tcctgggtgatg	gtaagagg
M. Mus	ccaaaaag	ccatcttctcctgtttcccttgaaatcccatcctgcttttctgtac---actacccc---TCACAAACC	aCAAG	ctgcagcaacatggatgcc...66...tcctgggtgatg	gtaagagg
R. Nor	ctagaaag	ccatcttctcctgtttcccttgaaatcccatcctgcttttctgtac---actacccc---TCACAAACC	aCAAG	ctgcagcaacatggatgcc...66...tcctgggtgatg	gtaagagg
C. Por	ctgaaag	ccatcttctcctgtttcccttgaaatcccatcctgcttttctgtac---actacccc---TCACAAACC	aCAAG	ctgcagcaacatggatgcc...66...tcctgggtgatg	gtaagagg
C. Fam	ccagaaag	ccatcttctcctgtttcccttgaaatcccatcctgcttttctgtacactactacccc---TCACAAACC	aCAAG	ctgcagcaacatggatgcc...66...tcctgggtgatg	gtaagagg
F. Cat	ccagaaag	ccatcttctcctgtttcccttgaaatcccatcctgcttttctgtacactactacccc---TCACAAACC	aCAAG	ctgcagcaacatggatgcc...66...tcctgggtgatg	gtaagagg
B. Tau	ccagaaag	ccatcttctcctgtttcccttgaaatcccatcctgcttttctgtac---actacccc---TCACAAACC	aCAAG	ctgcagcaacatggatgcc...66...tcctgggtgatg	gtaagagg
E. Cab	ccagaaag	ccatcttctcctgtttcccttgaaatcccatcctgcttttctgtac---actacccc---TCACAAACC	aCAAG	ctgcagcaacatggatgcc...66...tcctgggtgatg	gtaagagg
O. Avi	tcagaaag	ccatcttctcctgtttcccttgaaatcccatcctgcttttctgtac---actacccc---TCACAAACC	aCAAG	ctgcagcaacatggatgcc...66...tcctgggtgatg	gtaagagg
L. Afr	ccagaaag	ccatcttctcctgtttcccttgaaatcccatcctgcttttctgtac---actgccc---TCACAAACC	aCAAG	ctgcagcaacatggatgcc...66...tcctgggtgatg	gtaagagg
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id=74907 gene=ENSG0000092199 name=HNRNPC segment=chr14.21730760.21730927.-1 type=A5 VIEW

Figure 70:



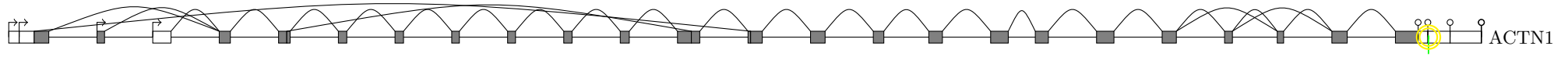
H. Sap	tttcacag	GGCAGCAAGgCGAA	ccccatccctactcactgga...117...gcaaagtacag	gtgttttt
R. Mac	tttcacag	GGCAGCAAGgCGAA	ccccatccctactcactgga...117...gcaaagtacag	gtgttttt
P. Tro	tttcacag	GGCAGCAAGgCGAA	ccccatccctactcactgga...117...gcaaagtacag	gtgttttt
P. Abe	tttcacag	GGCAGCAAGgCGAA	ccccatccctactcactgga...117...gcaaagtacag	gtgttttt
C. Jac	tttcacag	GGCAGCAAGgCGAA	ccccatccctactcactgga...120...gcaaagtacag	gtgttttt
M. Mus	tttcacag	GGCAGCAAGgCGAA	ccccatcctactcactgga...118...gcaaacatacag	gtgttttt
R. Nor	tttcacag	GGCAGCAAGgCGAA	ccccatcctactcactgga...118...gcaaacatacag	gtgttttt
C. Por	tttcacag	GGCAGCAAGgCGAA	ccccatccctactcactgga...118...gaaaatttacag	gtgttttt
O. Cun	tttcacag	GGCAGCAAGgCGAA	ccccatccctactcactgga...115...gaaaatttacag	gtgttttt
C. Fam	tttcacag	GGCAGCAAGgCGAA	ccccatccctactcactgga...118...gaaaatttacag	gtgttttt
F. Cat	tttcacag	GGCAGCAAGgCGAA	ccccatccctactcactgga...118...gaaaatttacag	gtgttttt
B. Tau	tttcacag	GGCAGCAAGgCGAA	ccccatccctactcactgga...118...gaaaatttacag	gtgttttt
E. Cab	tttcacag	GGCAGCAAGgCGAA	ccccatcccttctcactgga...118...gaaaatttacag	gtgttttt
L. Afr	tttcacag	GGCAGCAAGgCGAA	ccccatccctactcactgga...118...gaaaattgcag	gtgttttt
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id=74903 gene=ENSG0000092199 name=HNRNPC segment=chr14_21731826_21731988_-1 type=A5

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R. Mac	atgtacag	gtgtttttttt...150...attgatgatgtggaagggc	TTGCTTGtCTGCT	a-ctgaaaactttatccttgc--...102...gttttttacag	tgagattt
P. Tro	atgtacag	gtgtttttttt...150...attgatgatgtggaagggc	TTGCTTGtCTGCT	a-ctgaaaactttatccttgc--...102...gttttttacag	tgagattt
P. Abe	atgtacag	gtgtttttttt...150...attgatgatgtggaagggc	TTGCTTGtCTGCT	a-ctgaaaactttatccttgc--...102...gttttttacag	tgagattt
C. Jac	atgtacag	gtgtttttttt...150...attgatgatgtggaagggc	TTGCTTGtCTGCT	a-ctgagaactt-acccttgc...101...gttttttacag	tgagattt
M. Mus	acatacag	gtgttttttta...161...actgatgatgtggaagggc	TTGCTTGtCTGCT	a-ttgagaacattacccttgc--...101...gttttttacag	tgagattt
R. Nor	acatacag	gtgttttttta...161...actgatgatgtggaagggc	TTGCTTGtCTGCT	atttgagaacatta--ttacc...105...gttttttacag	tgagattt
C. Por	atttacag	gtgtttttttt...137...atggatgatgtggaagggc	TTGCTTGtCTGCT	a-ctgagaacatta-ccttgc-...99...gttttttacag	tgagattt
O. Cun	atttacag	gtgtttttttt...148...attgatgatgtggaagggc	TTGCTTGtCTGCT	a-ctgagaactttacccttgc--...102...gttttttacag	tgagattt
C. Fam	atttacag	gtgtttttttt...150...attgatgatgtggaagggc	TTGCTTGtCTGCT	a-ctgagaactttacccttgc--...102...gttttttacag	tgagattt
F. Cat	atttacag	gtgtttttttt...150...attgatgatgtggaagggc	TTGCTTGtCTGCT	a-ctgagaactttacccttgc--...102...gttttttacag	tgagattt
B. Tau	atttacag	gtgtttttttt...151...attgatgatgtggaagggc	TTGCTTGtCTGCT	a-ctgagaacttcacccttgc--...103...gttttttacag	tgagattt
E. Cab	atttacag	gtgtttttttt...150...attgatgatgtggaagggc	TTGCTTGtCTGCT	a-ctgagaactttacccttgc--...101...gttttttacag	tgagattt
L. Afr	atttgcag	gtgtttttttt...152...aatgataatgtggaagggc	TTGCTTGtCTGCT	a-ctgagaactttacccttgc--...102...gttttttacag	tgagattt
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id=74904 gene=ENSG0000092199 name=HNRNPC segment=chr14_21731496_21731825_-1 type=A5 VIEW

Figure 71:



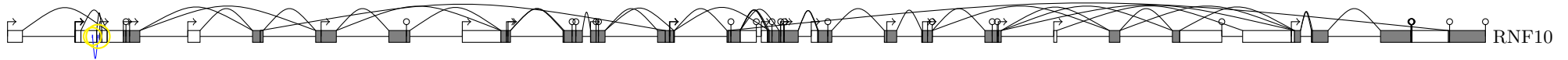
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P.Tro	cctgcctg	ggttcggtttca...61...----	agtgacagtttacaaaattaTTTcTGC	AAAAAaga
P.Abe	cctgcctg	ggttcggtttca...61...----	agtgacagtttacaaaattaTTTcTGC	AAAAAaga
M.Mus	gctggcctg	ggttcattatth...63...----	agtgacagtttacaaaattaTTTcTGC	AAAAAagg
R.Nor	gctgtctg	cgtttggtttca...60...----	agtgacagtttacaaaattaTTTcTGC	AAAAAagg
O.Cun	ctgcccag	ggcatgggtctcg...65...----	agtgacagtttacaaaattaTTTcTGC	AAAAAaga
C.Fam	ccgcccg	ggttaggtctcc...64...----	agtgacagtttacaaaattaTTTcTGC	AAAAAaga
F.Cat	ccagcccg	ggtttgggtctcc...69...----	agtgacagtttacaaaattaTTTcTGC	AAAAAaaa
B.Tau	ccgcccg	ggtttgggttca...59...----	agtgacagtttacaaaattaTTTcTGC	AAAAAaga
E.Cab	ccgcccg	ggtgtgggttcc...58...----	aagtgacagtttac-aaattaTTTcTGC	AAAAAaga
S.Sus	ccagcccg	ggtttgggttct...56...cgtga	agtgacagtttacaaaAATTaTTTcTGC	AAAAAaga
L.Afr	ccgcccg	ggttcgattctg...60...----	agtgacagtttacaaaattaTTTcTGC	AAAAAaga
	*	*	*****	*****

id=133368 gene=ENSG0000072110 name=ACTN1 segment=chr14.69341399.69341499_-1 type=E3

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R.Mac	tTTcTGC	AaaAAAG	-----	aaaaaaaaagttacgttaa...190...atcatttcttc	aatctcat
P.Tro	tTTcTGC	AaaAAAG	-----	aaaaaaaaagttacgttaaaa...192...atcatttctcc	aatctcat
P.Abe	tTTcTGC	AaaAAAG	-----	aaaaaaaaagttacgttaaa...194...atcatttctcc	aatctcat
M.Mus	tTTcTGC	AaaAAAG	-----	gataaaaaaaaaagttacgtt...222...atcatttctct	aatttcat
R.Nor	tTTcTGC	AaaAAAG	-----	gaaaaaaaaagttacattta...214...gttcatttctct	aatttcat
O.Cun	tTTcTGC	AaaAAAG	-----	aaaaaaaaagaaaaaaag...231...atcatttctcc	gctctcac
C.Fam	tTTcTGC	AaaAAAG	-----	aaaaaaaaagttatgta...224...atcatttctcc	aatctcat
F.Cat	tTTcTGC	AaAAAA	-----	aagaaaaaaaaagttacat...224...atcatttctcc	aatctcat
B.Tau	tTTcTGC	AaaAAAG	-----	aaaaaaaaagttacgttaaaa...209...atcatttctcc	aatctctt
E.Cab	tTTcTGC	AaaAAAG	-----	aaaaaaaaagttacgttaaaaa...202...atcatttctct	aatctcat
S.Sus	tTTcTGC	AaaAAAG	AaAGTT	acgttaaaaaaaaaagtaaaaa...192...atcatttctcc	aatctcat
L.Afr	tTTcTGC	AaaAAAG	-----	aaaaaaaaagttacgtt...191...atcatttctcc	aatctcgt
	*****	*****		**** ** *	*****

id=133369 gene=ENSG0000072110 name=ACTN1 segment=chr14.69341169.69341398_-1 type=E3 VIEW

Figure 72: CS=7.8



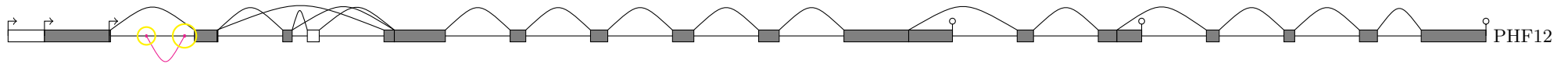
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R.Nor	gcccagag	gcgagtgtccgt...53...--gcccgcggcgggagagcgt---	GTCCGGCCGGCCGGCCGGCC	tcgcg-acctcc---cgcgcctccccttccccgcagcctccg	ccccgcca
C.Por	gcctagag	gcgagtgtccat...53...--gcccgcggcgggagagcgt---	GTCCGGCCGGCCGGCCGGCC	tcgcgcaacctcc---ttctatttccccttccccgcagcctccg	ccccgcca
C.Fam	gcccagag	gcgagtgtccgt...53...--gcccgcggcgggagagcgt---	GTCCGGCCGGCCGGCCGGCC	tcgcgcaacctcc---ctcgcctccccttccccgcagcctccg	ccccgcca
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L.Afr	gccctgag	gcgagtgtccgt...51...--cccacgcggcgggagagcgt---	GTCCGGCCGGCCGGCCGGCC	tcgcgcaacctcc---ctcatctccccttccccgcagcctccg	ccccgcca
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id=702453 gene=ENSG0000022840 name=RNF10 segment=chr12_120972211_120972360.1 type=A5

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R.Mac	agcctccG	CCCCGCCaGGCCcGGCC	GG-ACtcccagc	cccggcct
P.Tro	agcctccG	CCCCGCCaGGCCcGGCC	-cggactcccagc	cccggcct
P.Abe	agcctccG	CCCCGCCaGGCCcGGCC	-cggactcccagc	cccggcct
C.Jac	agcctccG	CCCCGCCaGGCCcGGCC	aaGTACtcccagc	cccggcct
R.Nor	agcctccG	CCCCGCCaGGCCcGGCC	GG-ACtcccagc	cccggcct
C.Por	agccttcG	CCCCGCCaGGCCcGGCC	GG-ACtcccagc	cccggcct
C.Fam	agcctccG	CCCCGCCaGGCCcGGCC	GG-ACtcccagc	cccggcct
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E.Cab	agcctccG	CCCCGCCaGGCCcGGCC	GG-ACtcccagc	cccggcct
S.Sus	agcctccG	CCCCGCCaGGCCcGGCC	GG-ACtcccagc	cccggcct
O.Avi	agcctccG	CCCCGCCaGGCCcGGCC	GG-ACtcccagc	cccggcct
L.Afr	agcctccG	CCCCGCCaGGCCcGGCC	GG-ACtcccagc	cccggcct
	**** **	*****	* ** * **	*****

id=702454 gene=ENSG0000022840 name=RNF10 segment=chr12_120972361_120972390.1 type=A5 VIEW

Figure 73:



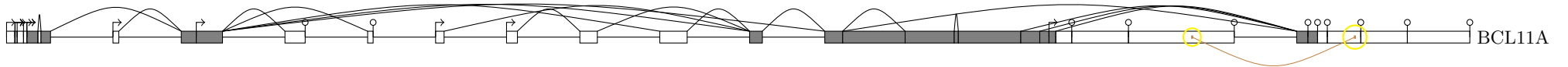
H. Sap	tgatggag	gtaagagtggcc...230...-----atctcgttgaccggcaggc	CTCC	CACCCCTTCTT	gttggcccctttgtgcttcc...337...atgtgtgtgcag	caaatcca	
R. Mac	tgatggag	gtaagagtggcc...230...-----atctcgttgaccggcaggc	CTCC	CACCCCTTCTT	gttggcccctttgtgcttcc...338...atgtgtgtgcag	caaatcca	
P. Tro	tgatggag	gtaagagtggcc...1034...-----atctcgttgaccggcaggc	CTCC	CACCCCTTCTT	gttggcccctttgtgcttcc...337...atgtgtgtgcag	caaatcca	
P. Abe	tgatggag	gtaagagtggcc...230...-----atctcgttgaccggcaggc	CTCC	CACCCCTTCTT	gttggcccctttgtgcttcc...337...atgtgtgtgcag	caaatcca	
C. Jac	tgatggag	gtaagagtggcc...228...-----atctcgttgaccggcaggc	CTCC	CACCCCTTCTT	gttggcccctttgtgcttcc...337...atgtgtgtgcag	caaatcca	
M. Mus	tgatggag	gtaagagtggcc...224...-----atctcgttgaccggcaggc	CTCC	CACCCCTTCTT	gttggcccctttgtgcttcc...333...atgtgtgtgcag	caaatcca	
R. Nor	tgatggag	gtaagagtggcc...217...-----catttcattgaccggcaggc	CCTCC	CACCCCTTCTT	gttggcccctttgtgcttcc...334...atgtgtgtgcag	caaatcca	
C. Por	tgatggag	gtaagagtggcc...220...gcccactccatctcgttgca	CCGGCGGGC	CTCC	CACCCCTTCTT	gttggcccctttgtgcttcc...333...atgtgtgtgcag	caaatcca
O. Cun	tgatggag	gtaagagtggcc...229...-----atcgcgttgaccggcaggc	CTCC	CACCCCTTCTT	gttggcccctttgtgcttcc...336...atgtgtgtgcag	caaatcca	
C. Fam	tgatggag	gtaagagtggcc...221...accactccatgctgatgca	CCGGCGGGC	CTCC	CACCCCTTCTT	gttggcccctttgtgcttcc...333...atgtgtgtgcag	caaatcca
F. Cat	tgatggag	gtaagagtggcc...220...accactccatgctgatgca	CCGGCGGGC	CTCC	CACCCCTTCTT	gttggcccctttgtgcttcc...334...atgtgtgtgcag	caaatcca
B. Tau	tgatggag	gtaagagtggcc...229...-----atctcgttgaccggcaggc	CTCC	CACCCCTTCTT	gttggcccctttgtgcttcc...333...atgtgtgtgcag	caaatcca	
E. Cab	tgatggag	gtaagagtggcc...230...-----atctcgttgaccggcaggc	CTCC	CACCCCTTCTT	gttggcccctttgtgcttcc...336...atgtgtgtgcag	caaatcca	
L. Afr	tgatggag	gtaagagtggcc...224...-----atctcgttagcaccggcaggc	CTCC	CACCCCTTCTT	gttggcccctttgtgcttcc...328...atgtgtgtgcag	caaatcca	
	*****	***** *****	** *	***** * *****	** ***** ** *	**** *****	***** **

id=401062 gene=ENSG00000109118 name=PHF12 segment=chr17_27277265_27277912_-1 type=IN

H. Sap	tgatggag	gtaagagtggcc...522...ggaagaaggacaaaaggggg	GAGAGGG	gtGGGTGacGGAG	aaaccgcgcgggggggcga-----	42...atgtgtgtgcag	caaatcca
R. Mac	tgatggag	gtaagagtggcc...523...ggaagaaggacaaaaggggg	GAGAGGG	gtGGGTGacGGAG	aagccgcgcgggggggcga-----	42...atgtgtgtgcag	caaatcca
P. Tro	tgatggag	gtaagagtggcc...1326...ggaagaaggacaaaaggggg	GAGAGGG	gtGGGTGacGGAG	aaaccgcgcgggggggcga-----	42...atgtgtgtgcag	caaatcca
P. Abe	tgatggag	gtaagagtggcc...522...ggaagaaggacaaaaggggg	GAGAGGG	gtGGGTGacGGAG	aagccgcgcgggggggcga-----	42...atgtgtgtgcag	caaatcca
C. Jac	tgatggag	gtaagagtggcc...520...ggaagaaggacaaaaggggg	GAGAGGG	gtGGGTGacGGAG	aagccgcgcgggggggcga-----	42...atgtgtgtgcag	caaatcca
M. Mus	tgatggag	gtaagagtggcc...512...ggaagaaggacaaaaggggg	AAGAGGG	gtGGGTGacGGAG	aagccgcgcgggtgggacta-----	42...atgtgtgtgcag	caaatcca
R. Nor	tgatggag	gtaagagtggcc...507...ggaagaaggacaaaaggggg	AAGAGGG	gtGGGTGacGGAG	agccgcgcgggtgggactac-----	41...atgtgtgtgcag	caaatcca
C. Por	tgatggag	gtaagagtggcc...517...ggaagaaggacaaaaggggg	GAGAGGG	gtGGGTGacGGAG	aaGCTGcGCCGGgggggcgaaggattgcccgg	30...atgtgtgtgcag	caaatcca
O. Cun	tgatggag	gtaagagtggcc...520...ggaagaaggacaaaaggggg	GAGAGGG	gtGGGTGacGGAG	tagccgcgcgggggggcga-----	42...atgtgtgtgcag	caaatcca
C. Fam	tgatggag	gtaagagtggcc...518...ggaagaaggacaaaaggggg	GAGAGGG	gtGGGTGacGGAG	aaGCCTtGCCGGgggggcgacggaccgcccgg	30...atgtgtgtgcag	caaatcca
F. Cat	tgatggag	gtaagagtggcc...518...ggaagaaggacaaaaggggg	GAGAGGG	gtGGGTGacGGAG	aaGCCtGCCGGgggggcgacggaccgcccgg	30...atgtgtgtgcag	caaatcca
B. Tau	tgatggag	gtaagagtggcc...517...ggaagaaggacaaaaggggg	GAGAGGG	gtGGGTGacGGAG	atgctgcgcgggggggcga-----	42...atgtgtgtgcag	caaatcca
E. Cab	tgatggag	gtaagagtggcc...521...ggaagaaggacaaaaggggg	GAGAGGG	gtGGGTGacGGAG	aagccgcgcgggggggcga-----	42...atgtgtgtgcag	caaatcca
L. Afr	tgatggag	gtaagagtggcc...507...ggaagaaggacaaaaggggg	GAGAGGG	gtGGGTGacGGAG	aagccgcgcgggggggcga-----	42...atgtgtgtgcag	caaatcca
	*****	***** *****	***** *****	* * * * * * * * * *	* * * * * * * * *	**** *****	***** **

id=401062 gene=ENSG00000109118 name=PHF12 segment=chr17_27277265_27277912_-1 type=IN VIEW

Figure 74:



H. Sap	tagcactg	aaaaaaaaatctc...2226...-----gagaagcccgccttagtca	ATAC	TTTT	tgTAAATGGCAATGcAGAAT	at	ttttgttattggccttttc--...303...aaaaattaag	tacacatt
R. Mac	tagcacgg	aaaaaaaaatctc...2228...-----gagaagcccgccttagtca	ATAC	TTTT	tgTAAATGGCAATGcAGAAT	at	ttttgttattggccttttc--...303...aaaaattaag	tacacatt
P. Tro	tagcactg	aaaaaaaaatctc...2228...-----gagaagcccgccttagtca	ATAC	TTTT	tgTAAATGGCAATGcAGAAT	at	ttttgttattggccttttc--...302...aaaaattaag	tacacatt
P. Abe	tagcactg	aaaaaaaaatctc...2227...-----gagaagcccgccttagtca	ATAC	TTTT	tgTAAATGGCAATGcAGAAT	at	ttttgttattggccttttc--...302...aaaaattaag	tacacatt
M. Mus	tagcagt	aaaaaaaggtgc...2261...-----gagaagcccgccttagtca	ATAC	TTTT	tgTAAATGGCAATGcAGAAT	at	ttttgttattggccttttc--...308...aaaaattaag	tactatgt
R. Nor	tagcactg	agaacacgtgct...2333...-----agagaagcccgccttagtca	AGTACT	TTTT	tgTAAATGGCAATGcAGAAT	at	ttttgttattggccttttc--...307...aaaaattaag	tacaatgt
C. Por	tagcactg	agaaaaattgct...2215...-----gagaagcccgccttagtca	ATAC	TTTT	tgTAAATGGCAATGcAGAAT	at	ttttgttattggccttttc--...299...aaaaattaag	tacacaat
O. Cun	cagcactg	aaataaaaatct...2228...-----gagaagcccgccttagtca	ATAC	TTTT	tgTAAATGGCAATGcAGAAT	at	ttttgttattggccttttc--...306...aaaaattaag	tacacaat
C. Fam	cggcactg	aaagaaaatctc...2243...-----gagaagcccgccttagtca	ATAC	TTTT	tgTAAATGGCAATGcAGAAT	at	ttttgttattggccttttc--...302...aaaaattaag	tacacaat
F. Cat	cagcactg	aaagaaaatctc...2255...-----gagaagcccgccttagtca	ATAC	TTTT	tgTAAATGGCAATGcAGAAT	at	ttttgttattggccttttc--...304...aaaaattaag	tacacaat
B. Tau	tggcactg	aaagaaaatcta...2523...gttctattggaaaaaccact--GTCTgtGTTTTTTG					gcagttgtctgcattaacct...38...aaaaattaag	tacacaat
E. Cab	cagcactg	aaagaaaatctc...2202...-----gagaagcccgccttagtca	ATAC	TTTT	tgTAAATGGCAATGcAGAAT	at	ttttgttattggccttttc--...302...aaaaattaag	tacacaat
S. Sus	tggcactg	aaagaaaatctc...2247...-----gagaagcccgccttagtca	ATAC	TTTT	tgTAAATGGCAATGcAGAAT	at	ttttgttattggccttttc--...303...aaaaattaag	tacacaat
L. Afr	tagcactg	aaaaaataatt...2237...-----agagaagcccgccttagtca	AGTAC	TTTT	tgTAAATGGCAATGcAGAAT	at	ttttgttattggccttttc--...311...aaaaattaag	ttcacaat
		*** * * * *			**** * * * * * * * * *		*** * * * * *	***** * * * *

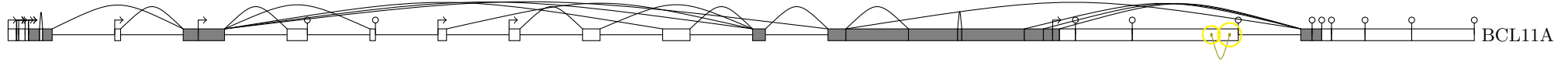
id=418185 gene=ENSG00000119866 name=BCL11A segment=chr2.60684333.60686954-1 type=AN

H. Sap	cagcctag	gcctg--cagcg--ccattttatttata-tttt:::ggaaatgagcagtgagtcgcc--a-acccttggtttctatac	ATTCT	TGTTGTC	T
R. Mac	cagcctgg	acctg--cagtg--ccattttatttata-tttt:::ggaaatgagcagtgagtcgcc--a-acccttggtttctatac	ATTCT	TGTTGTC	T
P. Tro	cagcctag	gcctg--cagtg--ccattttatttata-tttt:::ggaaatgagcagtgagtcgcc--a-acccttggtttctatac	ATTCT	TGTTGTC	T
P. Abe	cagcctag	gcctg--cagtg--ccattttatttata-tttt:::ggaaatgagcagtgagtcgcc--a-acccttggtttctatac	ATTCT	TGTTGTC	T
M. Mus	cagcctgg	gcctg--cagtg--ccattttatttata-tttt:::ggaaatgagcagtgagtcgcc--a-acccttggtttctatac	ATTCT	TGTTGTC	T
R. Nor	cagcctgg	gcctg--cagtg--ccattttatttata-tttt:::ggagatgagcagtgagtcgcc--a-acccttggtttctatac	ATTCT	TGTTGTC	T
C. Por	cagcctgg	gcctg--cagtg--ccattttatttata-tttt:::ggaaatgagcagtgagtcgcc--a-acccttggtttctatac	ATTCT	TGTTGTC	T
O. Cun	cagcctgg	gcctg--cagcg--ccattttatttata-tttt:::ggaaatgagcagtgagtcgcc--g-gcccttggtttctatac	ATTCT	TGTTGTC	T
C. Fam	ctgcccgg	gcctg--cagtg--ccattttatttata-tttt:::ggaaatgagcagtgagtcgcc--a-acccttggtttctatac	ATTCT	TGTTGTC	T
F. Cat	ctgcccag	gcctg--cagtg--ccattttatttata-tttt:::ggaaatgagcagtgagtcgcc--a-acccttggtttctatac	ATTCT	TGTTGTC	T
B. Tau	ctgcccgg	gcctg--cagtg--ccattttatttata-tttt:::ggaaatgagcagtgagtcgcc--a-acccttggtttctatac	ATTCT	TGTTGTC	T
E. Cab	ctgcccgg	gcctg--cagtg--ccattttatttata-tttt:::ggaaatgagcagtgagtcgcc--g-acccttggtttctatac	ATTCT	TGTTGTC	T
S. Sus	ctgcccgg	gcccg--cagtg--ccattttatttata-tttt:::ggaaatgagcagtgagtcgcc--a-acccttggtttctatac	ATTCT	TGTTGTC	T
L. Afr	ctgcccgg	gcctg--cagtg--ccattttatttata-tttt:::ggaaatgagcagtgagtcgcc--a-acccttggtttctatac	ATTCT	TGTTGTC	T
		* * * * *			** * * * * * * * * * *

H. Sap	TTAAAAAGTGT	-----:attg-acacaataaatgttgagcttaggtg	gtgtttgc
R. Mac	TTAAAAAGTGT	-----:attg-acacaataaatgttgagcttaggtg	gtgtttgc
P. Tro	TTAAAAAGTGT	-----:attg-acacaataaatgttgagcttaggtg	gtgtttgc
P. Abe	TTAAAAAGTGT	-----:attg-acacaataaatgttgagcttaggtg	gtgtttgc
M. Mus	TTAAAAAGTGT	-----:attg-acacaataaatgttgagcttaggtg	gtgtttgc
R. Nor	TTAAAAAGtGTGCT	-----:attg-acacaataaatgttgagcttaggtg	gtgtttgc
C. Por	TTAAAAAGTGT	-----:attg-acacaataaatgttgagcttaggtg	gtgtttgc
O. Cun	TTAAAAAGTGT	-----:attg-acacaataaatgttgagcttaggtg	gtgtttgc
C. Fam	TTAAAAAGTGT	-----:attg-acacaataaatgttgagcttaggtg	gtgtttgc
F. Cat	TTAAAAAGTGT	-----:attg-acacaataaatgttgagcttaggtg	gtgtttgc
B. Tau	-CAAAAAACAGAC	ccacattggaacagtgaatcagtcgccctagagaggtctg:::attg-acacaataaatgttgagcttaggtg	gtgtttgt
E. Cab	TTAAAAAGTGT	-----:attg-acacaataaatgttgagcttaggtg	gtgtttgc
S. Sus	TTAAAAAGTGT	-----:attg-acacaataaatgttgagcttaggtg	gtgtttgc
L. Afr	TTAAAAAGtGTGCT	-----:attg-acacaataaatgttgagcttaggtg	gtgtttgc
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id=418190 gene=ENSG00000119866 name=BCL11A segment=chr2.60679289.60679556-1 type=EN VIEW

Figure 75:



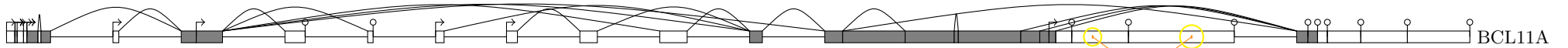
H. Sap	tagcactg	aaaaaaaaatctc...2359...--tttattattgcttatgtgcc---	CTGTtCAA	AAACAGAGGCA	---cttaattgatcttttattt...181...aaaaattaaag	tacacatt	
R. Mac	tagcacgg	aaaaaaaaatctc...2361...--tttattattgcttatgtgcc---	CTGTtCAA	AAACAGAGGCA	---cttaattgatcttttattt...181...aaaaattaaag	tacacatt	
P. Tro	tagcactg	aaaaaaaaatctc...2361...--tttattattgcttatgtgcc---	CTGTtCAA	AAACAGAGGCA	---cttaattgatcttttattt...180...aaaaattaaag	tacacatt	
P. Abe	tagcactg	aaaaaaaaatctc...2360...--tttattattgcttatgtgcc---	CTGTtCAA	AAACAGAGGCA	---cttaattgatcttttattt...180...aaaaattaaag	tacacatt	
M. Mus	tagcagtg	aaaaaaagtgc...2394...--tttattattgcttatatgccc---	CTGTtCAA	AAACAGAGGCA	---cttaattgatcttttattt...186...aaaaattaaag	tactatgt	
R. Nor	tagcactg	agaacacgtgct...2261...--tttttattgcccataaaacta	AATGgTGCTTTATATt	AGATT	ggaagaattcatatgcaa---.387...aaaaattaaag	tacaatgt	
C. Por	tagcactg	agaaaaattgct...2346...tatttattattgct--tgtgcc---	CTGTtCAA	AAACAGAGGCA	---cttaattgatcttttattt...179...aaaaattaaag	tacacaat	
O. Cun	cagcactg	aaataaaaatct...2361...--tttattattgcttggtgcc---	CTGTtCAA	AAACAGAGGCA	---ctgaattgatcttttattt...184...aaaaattaaag	tacacaat	
C. Fam	cggcactg	aaagaaaatctc...2376...--tttattattgcttacgtgcc---	CTGTtCAA	AAACAGAGGCA	---cttaattgatcttttattt...180...aaaaattaaag	tacacaat	
F. Cat	cagcactg	aaagaaaatctc...2388...--tttattattgcttatgtgcc---	CTGTtCAA	AAACAGAGGCA	---cttaattgatcttttattt...182...aaaaattaaag	tacacaat	
B. Tau	tggcactg	aaagaaaatcta...2378...--tttattattgcttatgtgcc---	CTGTtCAA	AAACAGAGGCA	---cttaattgatcttttattt...180...aaaaattaaag	tacacaat	
E. Cab	cagcactg	aaagaaaatctc...2335...--tttattattgcttatgtgcc---	CTGTtCAA	AAACAGAGGCA	---cttaattgatcttttattt...180...aaaaattaaag	tacacaat	
S. Sus	tggcactg	aaagaaaatctc...2174...--tttttattgcccataaaacta	AATGgTGCTTTATATt	AGATT	ggaagaattcatatgcaa---.383...aaaaattaaag	tacacaat	
L. Afr	tagcactg	aaaaaaaaatctc...2370...--tttattattgcttacgtgcc---	CTGTtCAA	AAACAGAGGCA	---cttaattgatcttttattt...189...aaaaattaaag	ttcacaat	
		*** * * *	*** * *****	** * * * **	***** * * *	***** *	* * *

id=418185 gene=ENSG00000119866 name=BCL11A segment=chr2.60684333.60686954_-1 type=AN

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R. Mac	tagcacgg	aaaaaaaaatctc...2505...----agttctattggaaaaccac	TGCTgTGTTTTTTTGGCAG	-----	ttgtctgattaacctgttc...35...aaaaattaaag	tacacatt	
P. Tro	tagcactg	aaaaaaaaatctc...2505...----agttctattggaaaaccac	TGCTgTGTTTTTTTGGCAG	-----	ttgtctgattaacctgttc...34...aaaaattaaag	tacacatt	
P. Abe	tagcactg	aaaaaaaaatctc...2504...----agttctattggaaaaccac	TGCTgTGTTTTTTTGGCAG	-----	ttgtctgattaacctgttc...34...aaaaattaaag	tacacatt	
M. Mus	tagcagtg	aaaaaaagtgc...2543...----agttctattggaaaaccac	TGCTgTGTTTTTTTGGCAG	-----	ttgtctgattaacctgttc...35...aaaaattaaag	tactatgt	
R. Nor	tagcactg	agaacacgtgct...2289...tttatatttagattggaaag-----	AATTTcATATGcAAAGCATATT		aaagagaagccccgttag-----...359...aaaaattaaag	tacaatgt	
C. Por	tagcactg	agaaaaattgct...2489...----agttctattggaaaaccac	TGCTgTGTTTTTTTGGCAG	-----	ttgtctgattaacctgttc...34...aaaaattaaag	tacacaat	
O. Cun	cagcactg	aaataaaaatct...2509...----agttctattggaaaaccac	TGCTgTGTTTTTTTGGCAG	-----	ttgtctgattaacctgttc...34...aaaaattaaag	tacacaat	
C. Fam	cggcactg	aaagaaaatctc...2519...----agttctattggaaaaccac	TGCTgTGTTTTTTTGGCAG	-----	ttgtctgattaacctgttc...35...aaaaattaaag	tacacaat	
F. Cat	cagcactg	aaagaaaatctc...2533...----agttctattggaaaaccac	TGCTgTGTTTTTTTGGCAG	-----	ttgtctgattaacctgttc...35...aaaaattaaag	tacacaat	
B. Tau	tggcactg	aaagaaaatcta...2522...----agttctattggaaaaccac	TGCTgTGTTTTTTTGGCAG	-----	ttgtctgattaacctgttc...34...aaaaattaaag	tacacaat	
E. Cab	cagcactg	aaagaaaatctc...2478...----agttctattggaaaaccac	TGCTgTGTTTTTTTGGCAG	-----	ttgtctgattaacctgttc...35...aaaaattaaag	tacacaat	
S. Sus	tggcactg	aaagaaaatctc...2202...tttatatttagattggaaag-----	AATTTcATATGcAAAGCATATT		aaagagaagccccgttag-----...355...aaaaattaaag	tacacaat	
L. Afr	tagcactg	aaaaaaaaatctc...2521...----agttctattggaaaaccac	TGCTgTGTTTTTTTGGCAG	-----	ttgtctgattaacctgttc...36...aaaaattaaag	ttcacaat	
		*** * * *	* ** *****	*** * **	* * * ** *	***** *	* * *

id=418185 gene=ENSG00000119866 name=BCL11A segment=chr2.60684333.60686954_-1 type=AN VIEW

Figure 76:



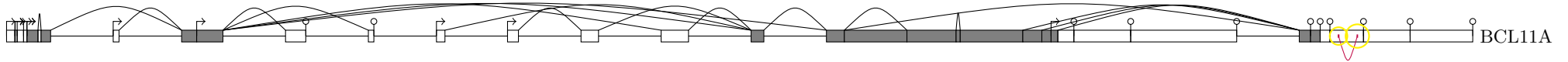
H. Sap	aacaaaca	a--acaacagaag...120...tgatctgtatggggcaatac	TATTGCATT	TACG	caaactttgagcctttctct...256...tagatagcactg	aaaaaaaa
R. Mac	aacaaaca	a--acaacagaag...122...tgatctgtatggggcaatac	TATTGCATT	TACG	caaactttgagcctttctct...254...tagatagcacgg	aaaaaaaa
P. Tro	aacaaaca	a--acaacagaag...118...tgatctgtatggggcaatac	TATTGCATT	TACG	caaactttgagcctttctct...256...tagatagcactg	aaaaaaaa
P. Abe	aacaaaca	a--acaacagaag...121...tgatctgtatggggcaatac	TATTGCATT	TACG	caaactttgagcctttctct...256...tagatagcactg	aaaaaaaa
M. Mus	aacaaaca	a--acaacaacag...134...atgcatgtttggggcaatac	TATTGCATT	TACG	caaactttgagcctttctct...269...cagatagcactg	aaaaaaag
R. Nor	aacaaaca	a--acaacaacag...148...atgcatgtctggggcaatac	TATTGCATT	TACG	caaactttgagcctttctct...298...cagatagcactg	agaacacg
C. Por	aaaaaaca	a--acaacagaag...131...tgatctgtatggggcaatac	TATTGCATT	TACG	caaactttgagcctttctct...267...catgtagcactg	agaaaaat
O. Cun	agcaagca	a--gcaagcagaag...123...tgatctgtacggggcaatac	TATTGCATT	TACG	caaactttgagcctttctct...260...tagacagcactg	aaataaaa
C. Fam	aacaaaca	atttcaaacaga--...116...tgatctgtatggggcaatac	TATTGCATT	TACG	caaactttgagcctttctct...263...tcgacggcactg	aaagaaaa
F. Cat	aacaaaca	a--acaacagaag...111...tgatctgtatggggcaatac	TATTGCATT	TACG	caaactttgagcctttctct...259...tagacagcactg	aaagaaaa
B. Tau	aacaaaca	a--acaacagaag...113...tgatctgtatggggcaatac	TATTGCATT	TACG	caaactttgagcctttctct...272...tagatggcactg	aaagaaaa
E. Cab	aacaaaca	a--acaacagaag...112...tgatctgtatggggcaatac	TATTGCATT	TACG	caaactttgagcctttctct...260...tagacagcactg	aaagaaaa
L. Afr	caaaaaca	a--acaaccagaaa...110...tgatctgtatggggcaatac	TATTGCATT	TACG	caaactttgagcctttctct...261...taaatagcactg	aaaaaaat
	** ** *	* ** * *	***	*****	*** *	* * *

id=418184 gene=ENSG00000119866 name=BCL11A segment=chr2_60686955_60687408_-1 type=AN

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R. Mac	tagcacgg	aaaaaaaaatctc...2237...-cgctttagtcaatacttttt	TGTAAAATG	gCAATG	cagaatattttgttattggc...309...aaaaaattaaag	tacacatt
P. Tro	tagcactg	aaaaaaaaatctc...2237...-cgctttagtcaatacttttt	TGTAAAATG	gCAATG	cagaatattttgttattggc...308...aaaaaattaaag	tacacatt
P. Abe	tagcactg	aaaaaaaaatctc...2236...-cgctttagtcaatacttttt	TGTAAAATG	gCAATG	cagaatattttgttattggc...308...aaaaaattaaag	tacacatt
M. Mus	tagcagtg	aaaaaaaggtgc...2270...-cgctttagtcaatacttttt	TGTAAAATG	gCAATG	cagaatattttgttattggc...314...aaaaaattaaag	tactatgt
R. Nor	tagcactg	agaacacgtgct...2343...-cgctttagtcaacttttt	TGTAAAATG	gCAATG	cagaatattttgttattggc...313...aaaaaattaaag	tacaatgt
C. Por	tagcactg	agaaaaattgct...2224...-cgctttagtcaatacttttt	TGTAAAATG	gCAATG	cagaatattttgttattggc...305...aaaaaattaaag	tacacaat
O. Cun	cagcactg	aaataaaaaatct...2237...-cgctttagtcaatacttttt	TGTAAAATG	gCAATG	cagaatattttgttattggc...312...aaaaaattaaag	tacacaat
C. Fam	cggcactg	aaagaaaatctc...2252...-cgctttagtcaatacttttt	TGTAAAATG	gCAATG	cagaatattttgttattggc...308...aaaaaattaaag	tacacaat
F. Cat	cagcactg	aaagaaaatctc...2264...-cgctttagtcaatacttttt	TGTAAAATG	gCAATG	cagaatattttgttattggc...310...aaaaaattaaag	tacacaat
B. Tau	tggcactg	aaagaaaatcta...2254...-cgctttagtcaatacttttt	TGTAAAATG	gCAATG	cagaatattttgttattggc...308...aaaaaattaaag	tacacaat
E. Cab	cagcactg	aaagaaaatctc...2211...-cgctttagtcaatacttttt	TGTAAAATG	gCAATG	cagaatattttgttattggc...308...aaaaaattaaag	tacacaat
L. Afr	tagcactg	aaaaaaataatt...2246...-cgctttagtcaacttttt	TGTAAAATG	gCAATG	cagaatattttgttattggc...317...aaaaaattaaag	ttcacaat
	*** *	* * *	*****	*****	*****	* * *

id=418185 gene=ENSG00000119866 name=BCL11A segment=chr2_60684333_60686954_-1 type=AN VIEW

Figure 77:



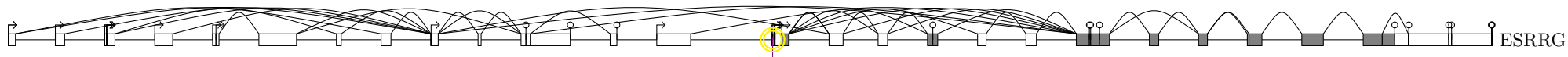
H. Sap	cagcctag	gcctg--cagcgc-cattttatttata-ttttttaataaaaagtaaaaacaaaaaa--cAGACccACATtGGAAcagtg-aatcagtc	ccataga-...167...gagc	tttaggtg	gtgtttgc	
R. Mac	cagcctgg	acctg--cagtg	c-cattttatttata-ttttttaataaaaagtaaaaacaaaaaa--cAGACccACATtGGAAcagtg-aatcagtc	ccataga-...166...gagc	tttaggtg	gtgtttgc
P. Tro	cagcctag	gcctg--cagtg	c-cattttatttata-ttttttaataaaaagtaaaaacaaaaaa--cAGACccACATtGGAAcagtg-aatcagtc	ccataga-...167...gagc	tttaggtg	gtgtttgc
P. Abe	cagcctag	gcctg--cagtg	c-cattttatttata-ttttttaataaaaagtaaaaacaaaaaa--cAGACccACATtGGAAcagtg-aatcagtc	ccataga-...167...gagc	tttaggtg	gtgtttgc
M. Mus	cagcctgg	gcctg--cagtg	c-cattttatttata-ttttttaataaaaagtaaaaacaaaaaa--cAGACccACATtGGAAcagtg-aatcagtc	ccataga-...164...gagc	tttaggtg	gtgtttgc
R. Nor	cagcctgg	gcctg--cagtg	c-cattttatttata-ttttttaataaaaagtaaaaacaaaaaa--cAGACccACATtGGAAcagtg-aatcagtc	ccataga-...167...gagc	tttaggtg	gtgtttgc
C. Por	cagcctgg	gcctg--cagtg	c-cattttatttata-ttttttaataaaaagtaaaaacaaaaaa--cAGACccACATtGGAAcagtg-aatcagtc	ccataga-...167...gagc	tttaggtg	gtgtttgc
O. Cun	cagcctgg	gcctg--cagtg	c-cattttatttata-ttttttaataaaaagtaaaaacaaaaaa--cAGACccACATtGGAAcagtg-aatcagtc	ccataga-...167...gagc	tttaggtg	gtgtttgc
C. Fam	ctgcccgg	gcctg--cagtg	c-cattttatttata-ttttttaataaaaagtaaaaacaaaaaa--cAGACccACATtGGAAcagtg-aatcagtc	ccataga-...170...gagc	tttaggtg	gtgtttgc
F. Cat	ctgcccag	gcctg--cagtg	c-cattttatttata-ttttttaataaaaagtaaaaacaaaaaa--cAGACccACATtGGAAcagtg-aatcagtc	ccataga-...169...gagc	tttaggtg	gtgtttgc
B. Tau	ctgcctgg	gcctg--cagtg	c-cattttatttata-ttttttaataaaaagtaaaaacaaaaaa--cAGACccACATtGGAAcagtg-aatcagtc	ccataga-...169...gagc	tttaggtg	gtgtttgc
E. Cab	ctgcctgg	gcctg--cagtg	c-cattttatttata-ttttttaataaaaagtaaaaacaaaaaa--cAGACccACATtGGAAcagtg-aatcagtc	ccataga-...167...gagc	tttaggtg	gtgtttgc
L. Afr	ctgcctgg	gcctg--cagtg	c-cattttatttata-ttttttaataaaaagtaaaaacaaaaaa--cAGACccACATtGGAAcagtg-aatcagtc	ccataga-...166...gagc	tttaggtg	gtgtttgc
	* * * * *	** * * * *	*****	*****	*****	*****

id=418190 gene=ENSG00000119866 name=BCL11A segment=chr2.60679289.60679556_-1 type=EN

H. Sap	cagcctag	gcctg--cagcgc...173...caaccctgtttctatacaTTCTATGTtGTCTtttaaaaagtgcttaacattg-acacaataaatg	tttaggtg	gtgtttgc
R. Mac	cagcctgg	acctg--cagtg...172...ccaccctgtttctatacaTTCTATGTtGTCTtttaaaaagtgcttaacattg-acacaataaatg	tttaggtg	gtgtttgc
P. Tro	cagcctag	gcctg--cagtg...173...caaccctgtttctatacaTTCTATGTtGTCTtttaaaaagtgcttaacattg-acacaataaatg	tttaggtg	gtgtttgc
P. Abe	cagcctag	gcctg--cagtg...173...caaccctgtttctatacaTTCTATGTtGTCTtttaaaaagtgcttaacattg-acacaataaatg	tttaggtg	gtgtttgc
M. Mus	cagcctgg	gcctg--cagtg...172...tgaccctgtttctatacaTTCTATGTtGTCTtttaaaaagtgcttaacattg-acacaataaatg	tttaggtg	gtgtttgc
R. Nor	cagcctgg	gcctg--cagtg...179...taaccctgtttctatacaTTCTATGTtGTCTtttaaaaagtgcttaacattg-acacaataaatg	tttaggtg	gtgtttgc
C. Por	cagcctgg	gcctg--cagtg...173...aaaccctgtttctatacaTTCTATGTtGTCTtttaaaaagtgcttaacattg-acacaataaatg	tttaggtg	gtgtttgc
O. Cun	cagcctgg	gcctg--cagtg...173...cggccctgtttctatacaTTCTATGTtGTCTtttaaaaagtgcttaacattg-acacaataaatg	tttaggtg	gtgtttgc
C. Fam	ctgcccgg	gcctg--cagtg...175...caaccctgtttctatacaTTCTATGTtGTCTtttaaaaagtgcttaacattg-acacaataaatg	tttaggtg	gtgtttgc
F. Cat	ctgcccag	gcctg--cagtg...175...caaccctgtttctatacaTTCTATGTtGTCTtttaaaaagtgcttaacattg-acacaataaatg	tttaggtg	gtgtttgc
B. Tau	ctgcctgg	gcctg--cagtg...175...aaaccctgtttctatacaTTCTATGTtGTCTtttaaaaagtgcttaacattg-acacaataaatg	tttaggtg	gtgtttgc
E. Cab	ctgcctgg	gcctg--cagtg...173...cgaccctgtttctatacaTTCTATGTtGTCTtttaaaaagtgcttaacattg-acacaataaatg	tttaggtg	gtgtttgc
L. Afr	ctgcctgg	gcctg--cagtg...172...taaccctgtttctatacaTTCTATGTtGTCTtttaaaaagtgcttaacattg-acacaataaatg	tttaggtg	gtgtttgc
	* * * * *	** * * * *	*****	*****

id=418190 gene=ENSG00000119866 name=BCL11A segment=chr2.60679289.60679556_-1 type=EN VIEW

Figure 79:



```

H.Sap  gGGGcTTAAGTCCttg
R.Mac  gGGGcTTAAGTCCttg
P.Tro  gGGGcTTAAGTCCttg
P.Abe  gGGGcTTAAGTCCttg
C.Jac  gGGGcTTAAGTCCttg
M.Mus  gGGGcTTAAGTCCttg
C.Por  gGGGcTTAAGTCCttg
O.Cun  gGGGcTTAAGTCCttg
C.Fam  gGGGcTTAAGTCCttg
F.Cat  gGGGcTTAAGTCCttg
B.Tau  gGGGcTTAAGTCCttg
E.Cab  gGGGcTTAAGTCCttg
S.Sus  gGGGcTTAAGTCCttg
L.Afr  gGGGcTTAAGTCCttg
*****

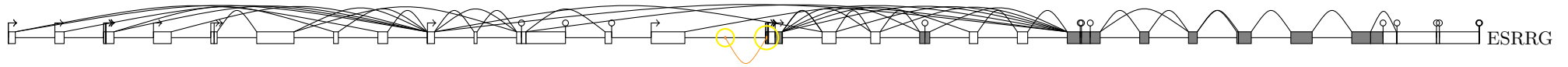
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id=218664 gene=ENSG00000196482 name=ESRRG segment=chr1.216896795_216896795_-1 type=A5

H.Sap	gGGCtTT	A	AGTCCT	tgattagga--gagtgtga	gagctttg
R.Mac	gGGCtTT	A	AGTCCT	tgattagga--gagtgtga	gagctttg
P.Tro	gGGCtTT	A	AGTCCT	tgattagga--gagtgtga	gagctttg
P.Abe	gGGCtTT	A	AGTCCT	tgattagga--gagtgtga	gagctttg
C.Jac	gGGCtTT	A	AGTCCT	tgattagga--gagtgtga	gagctttg
M.Mus	gGGCtTT	A	AGTCCT	tgattaggagagagtgtgc	gagcctcg
C.Por	gGGCtTT	A	AGTCCT	tgattagga--gcatgcga	gagctcgg
O.Cun	gGGCtTT	A	AGTCCT	tgattagga--gagtgtga	gagctttg
C.Fam	gGGCtTT	A	AGTCCT	tgattagga--gcgtgtga	gagctttg
F.Cat	gGGCtTT	A	AGTCCT	tgattagga--gagtgtga	gagctttg
B.Tau	gGGCtTT	A	AGTCCT	tgattagga--gagtgtga	gagctctg
E.Cab	gGGCtTT	A	AGTCCT	tgattagga--gagtgtga	gagctttg
S.Sus	gGGCtTT	A	AGTCCT	tgattagga--gagtgtga	gagctttg
L.Afr	gGGCtTT	A	AGTCCT	tgattagga--gagtgtga	gagctttg
*****	*	*****	*	** *	* ** *

id=218665 gene=ENSG00000196482 name=ESRRG segment=chr1.216896772_216896794_-1 type=A5 VIEW

Figure 80:



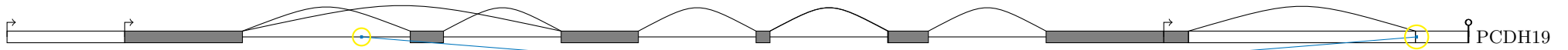
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R. Mac	ccaaaatt	gtaagtacaatg...4941..	-----ccctacttcatattaataag	CTCCAATCGGGGC	TT	AAGTCC	tt	
P. Tro	ccaaaatt	gtaagtacaatg...4941..	-----ccctacttcatattaataag	CTCCAATCGGGGC	TT	AAGTCC	tt	
P. Abe	ccaaaatt	gtaagtacaacg...4941..	-----ccctacttcatattaataag	CTCCAATCGGGGC	TT	AAGTCC	tt	
C. Jac	ccaaaatt	gtaagtacaatg...4941..	-----ccctacttcatattaataag	CTCCAATCGGGGC	TT	AAGTCC	tt	
M. Mus	ctcaaatt	gtgagtatagtg...4941..	-----ccctacttcatattaataag	CTCCAATCGGGGC	TT	AAGTCC	tt	
C. Por	ccaaaatt	gtaagtatgatg...4935..	gcaaaggcatgctgcatatt	CATGag	CTCCAATCGGGGC	TT	AAGTCC	tt
O. Cun	ccaaaatt	gtaagtaccgtg...4941..	-----ccctacttcatattaataag	CTCCAATCGGGGC	TT	AAGTCC	tt	
C. Fam	ccaaaatt	gtaagtatgatg...4940..	-----gcctacttcatattaataa	GCTCCAATCGGGGC	TT	AAGTCC	tt	
F. Cat	ccagaatt	gtaagtatgacg...4941..	-----ccctacttcatattaataag	CTCCAATCGGGGC	TT	AAGTCC	tt	
B. Tau	cccaaatt	gtaagtacaaca...4941..	-----ctctacttcatattaataag	CTCCAATCGGGGC	TT	AAGTCC	tt	
E. Cab	ccaaaatt	gtaagtatgatg...4945..	-----acttcatattaataagctcc	AATCGGGGC	TT	AAGTCC	tt	
S. Sus	cccaaatt	gtaagtatgagg...4941..	-----ctctacttcatattaataag	CTCCAATCGGGGC	TT	AAGTCC	tt	
L. Afr	ccagaatt	gtaagtacgatg...4941..	-----cctacttcatattaataag	CTCCAATCGGGGC	TT	AAGTCC	tt	
	*	****	** ****	** *****	** *****	*****	*****	

id=218663 gene=ENSG00000196482 name=ESRRG segment=chr1_216896796_216978284_-1 type=I5

H. Sap	gGGCtTT	A	AGTCctTGATTaGGAG	--agtgtga	gagctttg
R. Mac	gGGCtTT	A	AGTCctTGATTaGGAG	--agtgtga	gagctttg
P. Tro	gGGCtTT	A	AGTCctTGATTaGGAG	--agtgtga	gagctttg
P. Abe	gGGCtTT	A	AGTCctTGATTaGGAG	--agtgtga	gagctttg
C. Jac	gGGCtTT	A	AGTCctTGATTaGGAG	--agtgtga	gagctttg
M. Mus	gGGCtTT	A	AGTCctTGATTaGGAG	agagtgtgc	gagcctcg
C. Por	gGGCtTT	A	AGTCctTGATTaGGAGCATG	--cga	gagctcgg
O. Cun	gGGCtTT	A	AGTCctTGATTaGGAG	--agtgtga	gagctttg
C. Fam	gGGCtTT	A	AGTCctTGATTaGGAGC	--gtgtga	gagctttg
F. Cat	gGGCtTT	A	AGTCctTGATTaGGAG	--agtgtga	gagctttg
B. Tau	gGGCtTT	A	AGTCctTGATTaGGAG	--agtgtga	gagctctg
E. Cab	gGGCtTT	A	AGTCctTGATT	--aggcgagtgtga	gagctttg
S. Sus	gGGCtTT	A	AGTCctTGATTaGGAG	--agtgtga	gagctttg
L. Afr	gGGCtTT	A	AGTCctTGATTaGGAG	--agtgtga	gagctttg
	*****	*	*****	* * *	* ** *

id=218665 gene=ENSG00000196482 name=ESRRG segment=chr1_216896772_216896794_-1 type=A5 VIEW

Figure 81: CS=4.2



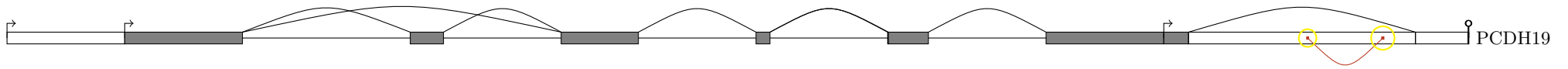
H. Sap	aactgcag	gtaaagccaagt...2533...tccaaaaaagaact-gaatc	ATTATGTG	AAAGT	aata-aatgactttgagaatc-----	...175...attcctttgcag	taattggt
R. Mac	aactgcag	gtaaagccaagt...2517...tccaaaaataaact-gcatc	ATTATGTG	AAAGT	taaca-aatgactttgagaatc-----	...175...attcctttgcag	taattggt
P. Tro	aactgcag	gtaaagccaagt...2404...tccaaaaataaact-gaatc	ATTATGTG	AAAGT	aata-aatgactttgagaatc-----	...175...attcctttgcag	taattggt
P. Abe	aactgcag	gtaaagccaagt...2577...tccaaaaataaact-gaatc	ATTATGTG	AAAGT	aata-aatgactttgagaatc-----	...433...attcctttgcag	taattggt
C. Jac	aactgcag	gtaaagccaagt...2607...tcctaaaatttagctg-aatt	ATTATGTG	AAAGT	aata-aatcaccttgagaatc-----	...176...attcctttgcag	taattggt
M. Mus	aattgcag	gtagagccaagt...2632...tcagacaataagctgaaatc	ATTATGTG	AAAGT	aaTACATGACAT-tgaaaatctgactacctttt...	...163...attcctttgcag	taattggt
R. Nor	aattgcag	gtagagccaagt...2629...tcaacaataagctgaaatc	ATTATGTG	AAAGT	caata-catgacattgagaat-----	...175...attcctttgcag	taattggt
C. Por	aactgcag	gtaaagccaagt...2529...ccaaaaagtaagctggaatc	ATTATGTG	AAAGT	taataaaatgacactgagaat-----	...175...cattcctttgcag	taattggt
O. Cun	aactgcag	gtagagccaagt...2497...tccaaacaataagcgg-aatc	ATTATGTG	AAAGT	cata-gatgactttgagaatc-----	...175...attcctttgcag	taattggt
C. Fam	aactgcag	gtagagccaagt...2573...ttcaacaataaggtg-aatc	ATTATGTG	AAAGT	aata-aatgactttgagactc-----	...176...attcctttgcag	taattggt
F. Cat	aactgcag	gtagagccaagt...2067...ttgaacaataaggtg-aatc	ATTATGTG	AAAGT	aata-aataactttgagaatc-----	...172...attcctttgcag	taattggt
E. Cab	aactgcag	gtagagccaagt...2525...tccaaacaataagctg-attc	ATTATGTG	AAAGT	aata-aatgac--tgagaatctg-----	...173...attcctttgcag	taattggt
L. Afr	aactgcag	gtaaagccaagt...2472...tccaaacaataagctg-aatc	ATTATGTG	AAAGT	aata-aatgactttgagaatc-----	...175...attcctttgcag	taattggt
	** *****	*** ***** *	* * *	* ***** ** *	*** * *	* *****	*****

id=421401 gene=ENSG00000165194 name=PCDH19 segment=chrX.99658663.99661448.-1 type=IN

H. Sap	-caccaatg	gttggttcttga...4283...-----	ctgatctgatgttatgtac	ATTTTCACA	g	TGAT	tgaa
R. Mac	-caccaatg	gttggttcttga...4878...-----	ctgatctgatgttatgtac	ATTTTCACA	g	TGAT	tgaa
P. Tro	-caccaatg	gttggttcttga...4282...-----	ctgatctgatgttatgtac	ATTTTCACA	g	TGAT	tgaa
P. Abe	-caccaatg	gttggttcttga...4594...-----	ctgatctgatgttatgtac	ATTTTCACA	g	TGAT	tgaa
C. Jac	-caccaatg	gttggttcttga...4871...-----	ctgatctgatgttatgtac	ATTTTCACA	g	TGAT	tgaa
M. Mus	-caccaatg	gttggttcttga...4744...ggttgatatgctgatctgt	ATGTTATGTA	ATTTTCACA	g	TGAT	tgaa
R. Nor	-caccaatg	gttggttcttga...4756...-----	tgatctgatgttatgtaca	TTTTTCACA	g	TGAT	tgac
C. Por	ttaccaac-	gttggttcttga...4744...-----	ctgatctgatatttatgtac	ATTTTCACA	g	TGAT	tgaa
O. Cun	-cagcaatg	gttggttcttga...4881...-----	ctgatctgatgttatgtac	ATTTTCACA	g	TGAT	tgaa
C. Fam	-caccaatg	gttggttcttga...4831...-----	ctgatttgatgttatgtac	ATTTTCACA	g	TGAT	tgaa
F. Cat	-cactaatg	gttggttcttga...4233...-----	ctgatctgatgttggtgtac	ATTTTCACA	g	TGAT	tgaa
E. Cab	-caccaatg	gttggttcttga...4863...-----	ctgatctgatgttatgtac	ATTTTCACA	g	TGAT	tgaa
L. Afr	-caccaatg	gttggttcttga...4947...-----	ctgatctgatgttatgtac	ATTTTCACA	g	TGAT	tgaa
	* **	***** ** *	***** ** *****	*****		*****	*****

id=421413 gene=ENSG00000165194 name=PCDH19 segment=chrX.99546869.99551193.-1 type=AN VIEW

Figure 83:



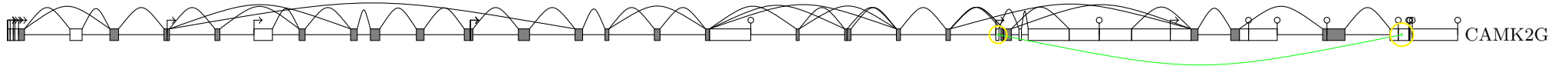
H.Sap	caccaatg	gttggttcttga...3821...	gatcttgattggaagcatt	GTAGGTCATTAGG	gaaaactgatgatgctgact...427...	acattttcacag	tgattgaa
R.Mac	caccaatg	gttggttcttga...4416...	gatcttgattggaagcatt	GTAGGTCATTAGG	gaaaactgatgatgctgact...427...	acattttcacag	tgattgaa
P.Tro	caccaatg	gttggttcttga...3820...	gatcttgattggaagcatt	GTAGGTCATTAGG	gaaaactgatgatgctgact...427...	acattttcacag	tgattgaa
P.Abe	caccaatg	gttggttcttga...4132...	gatcttgattggaagcatt	GTAGGTCATTAGG	gaaaactgatgatgctgact...427...	acattttcacag	tgattgaa
C.Jac	caccaatg	gttggttctcaa...4410...	gatcttgattggaagcatt	GTAGGTCATTAGG	gaaaactgatgatgctgact...426...	acattttcacag	tgattgaa
M.Mus	caccaatg	gttggctcttga...4294...	gaccttgattggaagcatt	GTAGGTCATTAGG	gaaactgatgatgctgact...426...	acattttcacag	tgattgaa
R.Nor	caccaatg	gttggttcttga...4294...	gaccttgattggaagcatt	GTAGGTCATTAGG	gaaactgatgatgctgact...426...	acattttcacag	tgattgac
O.Cun	cagcaatg	gttggttcttga...4417...	gatcttgattggaagcatt	GTAGGTCATTAGG	gaaaactgatgatgctgact...429...	acattttcacag	tgattgaa
C.Fam	caccaatg	gttggttcttga...4370...	gatcttgattggaagcatt	GTAGGTCATTAGG	gaaaactgatgatgctgact...426...	acattttcacag	tgattgaa
F.Cat	cactaatg	gttggttcttga...3771...	gatcttgattggaagcatt	GTAGGTCATTAGG	gaaaactgatgatgctgact...427...	acattttcacag	tgattgaa
B.Tau	caccaatg	gttggttcttga...4423...	gatcttgattggaagcatt	GTAGGTCATTAGG	gaaaactgatgatgctgact...428...	acattttcacag	tgattgaa
E.Cab	caccaatg	gttggttcttga...4400...	gatcttgattggaagcatt	GTAGGTCATTAGG	gaaaactgatgatgctgact...428...	acattttcacag	tgattgaa
O.Avi	tacaaaa	tctggtgttca...4474...	gatcttgattggaagcatt	GTAGGTCATTAGG	gaaaactgatgatgctgact...429...	acattttcacag	tgattgaa
L.Afr	caccaatg	gttggttcttga...4480...	gatcttgattggaagcatt	GTAGGTCATTAGG	gaaaactgatgatgctgact...432...	acattttcacag	tgattgaa
	* **	*** * *	** *****	*****	*****	*****	*****

id=421413 gene=ENSG00000165194 name=PCDH19 segment=chrX.99546869.99551193_-1 type=AN

H.Sap	caccaatg	gttggttcttga...4140...	cctctagtgaggggaatgag	CCTGATGACaCTAT	tactgtttacctgtcaaacc...107...	acattttcacag	tgattgaa
R.Mac	caccaatg	gttggttcttga...4735...	cctctagtgaggggaatgag	CCTGATGACaCTAT	tactgtttacctgtcaaacc...107...	acattttcacag	tgattgaa
P.Tro	caccaatg	gttggttcttga...4139...	cctctagtgaggggaatgag	CCTGATGACaCTAT	tactgtttacctgtcaaacc...107...	acattttcacag	tgattgaa
P.Abe	caccaatg	gttggttcttga...4451...	cctctagtgaggggaatgag	CCTGATGACaCTAT	tactgtttacctgtcaaacc...107...	acattttcacag	tgattgaa
C.Jac	caccaatg	gttggttctcaa...4730...	cctctagtgaggggaatgag	CCTGATGACaCTAT	tactgtttacctgtcaaacc...105...	acattttcacag	tgattgaa
M.Mus	caccaatg	gttggctcttga...4612...	cctctagtgaggggaatgag	CCTGATGACaCTAT	tactgtttacctgtcaaacc...107...	acattttcacag	tgattgaa
R.Nor	caccaatg	gttggttcttga...4612...	cctctagtgaggggaatgag	CCTGATGACaCTAT	tactgtttacctgtcaaacc...107...	acattttcacag	tgattgac
O.Cun	cagcaatg	gttggttcttga...4738...	cctctagtgaggggaatgag	CCTGATGACaCTAT	tactgtttacctgtcaaacc...107...	acattttcacag	tgattgaa
C.Fam	caccaatg	gttggttcttga...4688...	cctctagtgaggggaatgag	CCTGATGACaCTAT	tactgtttacctgtcaaacc...107...	acattttcacag	tgattgaa
F.Cat	cactaatg	gttggttcttga...4090...	cctctagtgaggggaatgag	CCTGATGACaCTAT	tactgtttacctgtcaaacc...107...	acattttcacag	tgattgaa
B.Tau	caccaatg	gttggttcttga...4743...	cctctagtgaggggaatgag	CCTGATGACaCTAT	tactgtttacctgtcaaacc...107...	acattttcacag	tgattgaa
E.Cab	caccaatg	gttggttcttga...4720...	cctctagtgaggggaatgag	CCTGATGACaCTAT	tactgtttacctgtcaaacc...107...	acattttcacag	tgattgaa
O.Avi	tacaaaa	tctggtgttca...4795...	cctctagtgaggggaatgag	CCTGATGACaCTAT	tactgtttacctgtcaaacc...107...	acattttcacag	tgattgaa
L.Afr	caccaatg	gttggttcttga...4804...	cctctagtgaggggaatgag	CCTGATGACaCTAT	tactgtttacctgtcaaacc...107...	acattttcacag	tgattgaa
	* **	*** * *	*****	*****	*****	*****	*****

id=421413 gene=ENSG00000165194 name=PCDH19 segment=chrX.99546869.99551193_-1 type=AN VIEW

Figure 84:



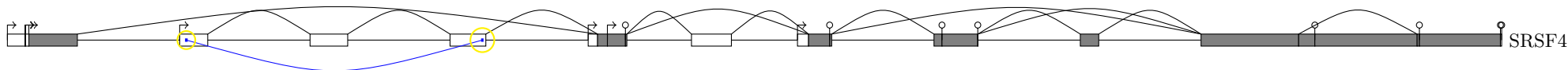
H. Sap	ctgccttg	ttctgtttgtt	TTGGCTGCTCTGCC	ttgccctgc	cctgcctc	-----
R. Mac	ctgccttg	ttctgtttgtt	TTGGCTGCTCTGCC	ttgccctgc	cctgcctc	-----
P. Tro	ctgccttg	ttctgtttgtt	TTGGCTGCTCTGCC	ttgccctgc	cctgcctc	-----
P. Abe	ctgccttg	ttctgtttgtt	TTGGCTGCTCTGCC	ttgccctgc	cctgcctc	-----
C. Jac	ctgccttg	ttctgtttgtt	TTGGCTGCTCTGCC	ttgccctgc	cctgcctc	gcctgcct
M. Mus	ctgcctta	ttctgtttgtt	TTGGCTGCTCTGCC	ttgccctgc	cctgcctc	-----
C. Por	ctgccttg	ttctgtttgtt	TTGGCTGCTCTGCC	ttgccctgc	cctgcctc	-----
O. Cun	ctgccttg	ttctgtttgtt	TTGGCTGcaCTGCC	ttgccctgc	cctgcctc	-----
C. Fam	ctgccttg	ttctgtttgtt	TTGGCTGCTCTGCC	ttgccctgc	cctgcctc	-----
B. Tau	ctgccttg	tttctgtttgtt	TTGGCTGCTCTGCC	ttgccctgc	cctgcctc	-----
E. Cab	ctgccttg	ttctgtttgtt	TTGGCTGctCTGCCTI	ggccctgc	cctgcctc	-----
S. Sus	ctgccttg	ttctgtttgtt	TTGGCTGCTCTGCC	ttgccctgc	cctgcctc	-----
L. Afr	ctgccttg	ttctgtttgtt	TTGGCTGCTCTGCC	ttgccctgc	cctgcctc	-----
	*****	**	*****	*****	*****	*****

id=168682 gene=ENSG00000148660 name=CAMK2G segment=chr10.75579427_75579460_-1 type=AN

H. Sap	tgtttgag	gtttaaaacaattcaattacaaaa	GCGGCAGCAGCCAA	tgacagcccctgcatgcagc...	46...	tttacatttaa--g	aaaaaaaa-
R. Mac	tgtttgag	gtttaaaacaattcaattacaaaa	GCGGCAGCAGCCAA	tgacagcccctgcatgcagc...	46...	tttacatttaa--g	aaaaaaaa-
P. Tro	tgtttgag	gtttaaaacaattcaattacaaaa	GCGGCAGCAGCCAA	tgacagcccctgcatgcagc...	46...	tttacatttaa--g	aaaaaaaa-
P. Abe	tgtttgag	gtttaaaacaattcaattacaaaa	GCGGCAGCAGCCAA	tgacagcccctgcatgcagc...	46...	tttacatttaa--g	aaaaaaag-
C. Jac	tgtttgag	gtttaaaacaattcaattacaaaa	GCGGCAGCAGCCAA	tgacagcccctgcatgcagc...	46...	tttacatttaa--g	aaaaaaaa-
M. Mus	cgtttgag	gtttaaaacaattcaattacaaa-	GCGGCAGCAGCCAA	tgacagcccctgcatgcagc...	47...	tttacatttaa--g	aaaaaaaa-
C. Por	cgtttgag	gtttaaaacaattaaattacaaa-	GCGGCAGCAGCCAA	tgacagcccctgcatgcagc...	46...	tttacatttaa--g	gaaaaaaa-
O. Cun	cgtttgag	gtttaaaacaattaaattacaaa-	GCGGCAGCAGCCAA	tgacagcccctgcatgcagc...	47...	tttacatttaa--g	gaaaaaaa-
C. Fam	cgtttgag	gtttaaaacaattaaattacaaa-	GCGGCAGCAGCCAA	tgacagcccctgcatgcagc...	46...	tttacatttaa--g	aaaaaaaa-
B. Tau	cgtttgag	gtttaaaacaattaaattacaaa-	GCGGCAGCAGCCAA	tgacagcccctgcatgcagc...	49...	--acatttaaggg	gaaaaaaa-
E. Cab	cgtttgag	gtttaaaacaattaaattacaaa-	GAGGCAGCAGCCAA	tgacagcccctgcatgcagc...	46...	tttacatttaa--g	gaaaaaaa-
S. Sus	cgtttgag	gtttaaaacaattaaattacaaa-	GCGGCAGCAGCCAA	tgacagcccctgcatgcagc...	47...	tttacatttaa--g	gaaaaaaa-
L. Afr	cgtttgag	gtttaaaacaattaaattacaaa-	GCGGCAGCAGCCAA	tgacagcccctgcatgcagc...	46...	tttacatttaa--g	aaaagaaa-
	*****	*****	*****	*****	*****	*****	*** **

id=168705 gene=ENSG00000148660 name=CAMK2G segment=chr10.75574058_75574173_-1 type=E3 VIEW

Figure 86:



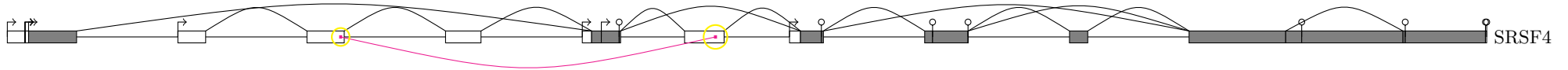
H. Sap	ttcttcta	gtctgttatgttctgaac	CCACac	ATGTTTTC	ggaaggaccagatggctgac...73...cctgccccaaag	gtcaattt
R. Mac	ttcttcta	gtctgttatgttctgaac	CCACac	ATGTTTTC	ggaaggaccagatggctgac...73...cctgccccaaag	gtcaattt
P. Tro	ttcttcta	gtctgttatgttctgaac	CCACac	ATGTTTTC	ggaaggaccagatggctgac...73...cctgccccaaag	gtcaattt
P. Abe	ttcttcta	gtctgttatgttctgaac	CCACac	ATGTTTTC	ggaaggaccagatggctgac...73...cctgccccaaag	gtcaattt
C. Jac	ttcttcta	gtctgttatgttctgaac	CCACac	ATGTTTTC	ggaaggaccagatggctgac...73...cctgccccaaag	gtcaattt
M. Mus	ttcttcta	gtctgttatgttctgaac	CCACac	ATGTTTTC	ggaaggaccagatggctgac...73...cctaccctgag	accagtgt
R. Nor	ttcttcta	gtctgttatgttctgaac	CCACac	ATGTTTTC	ggaaggaccagatggctgac...73...cctaccctgag	accagtgt
C. Por	ttcttcta	gtctgttatgttctgaac	CCACac	ATGTTTTC	ggaaggaccagatggctgac...73...tctgccccaaag	atcagtgt
O. Cun	ttcttcta	gtctgttatgttctgaac	CCACac	ATGTTTTC	ggaaggaccagatggctgac...75...cctgccccaaag	gtcaattc
C. Fam	ttcttcta	gtctgttatgttctgaac	CCACac	ATGTTTTC	ggaaggaccagatggctgac...75...cctgccccaaag	atcaattt
F. Cat	ttcttcta	gtctgttatgttctgaac	CCACac	ATGTTTTC	ggaaggaccagatggctgac...75...cctgccccaaag	atcaattt
B. Tau	ttcttcta	gtctgttatgttctgaac	CCACac	ATGTTTTC	ggaaggaccagatggctgac...72...acctgccccaaag	atcaattt
E. Cab	ttcttcta	gtctgttatgttctgaac	CCACac	ATGTTTTC	ggaaggaccagatggctgac...75...cctgccccaaag	atcagttt
S. Sus	ttcttcta	gtctgttatgttctgaac	CCACac	ATGTTTTC	ggaaggaccagatggctgac...74...acctgccccaaag	atcaattt
*****	*****	*****	*****	*****	*****	*****

id=284860 gene=ENSG00000116350 name=SRSF4 segment=chr1_29495015_29495151_-1 type=AN

H. Sap	ggctacag	caacatccctaa...112...ctgtcatgtccacatacaaaa--	GAAAa	GCATGTGG	cacagttttaggacaaaag	gtgagcag
R. Mac	ggctacag	caacatccctaa...112...ctgtcatgtccacatacaaaa--	GAAAa	GCATGTGG	cacagttttaggacaaaag	gtgagcag
P. Tro	ggctacag	caacatccctaa...112...ctgtcatgtccacatacaaaa--	GAAAa	GCATGTGG	cacagttttaggacaaaag	gtgagcag
P. Abe	ggctacag	caacatccctaa...112...ctgtcatgtccacatacaaaa--	GAAAa	GCATGTGG	cacagttttaggacaaaag	gtgagcag
C. Jac	ggctacag	caacatccctaa...112...ctgtcatgtccacatacaaaa--	GAAAa	GCATGTGG	cacagttttaggacaaaag	gtgagcag
M. Mus	ggctacag	caacatccctaa...111...ctctcatgtccacatacaga--	GAAAa	GCATGTGG	cacagttgtaggacaaaag	gtgagcag
R. Nor	ggctacag	caacatccctaa...112...ctctcatgtccacatacaaaa--	GAAAa	GCATGTGG	cacagttttaggacaaaag	gtgagcag
C. Por	ggctacag	caacatccctaa...112...ctgtcatgtccacatacaaaa--	GAAAa	GCATGTGG	cacagttttaggacaaaag	gtgagcag
O. Cun	ggctacag	caacatccctaa...110...ctgtcatgtccacatacaaaa--	GAAAa	GCATGTGG	cacagttttaggacaaaag	gtgagcag
C. Fam	ggctacag	caacatccctaa...112...ctgtcatgtccacatacaaaa--	GAAAa	GCATGTGG	cacagttgtaggacaaaag	gtgagcag
F. Cat	ggctacag	caacatccctaa...112...ctgtcatgtccacatacaaaa--	GAAAa	GCATGTGG	cacagttgtaggacaaaag	gtgagcag
B. Tau	ggctacag	caacatccctaa...102...ctgtcatgtccacatacaaaa--	GAAAa	GCATGTGG	cacagttttaggacaaaag	gtgagcag
E. Cab	ggctacag	caacatccctaa...112...ctgtcatgtccacattcaaaa--	GAAAa	GCATGTGG	cacagttttaggacaaaag	gtgagcag
S. Sus	ggctacag	caacatccctaa...113...--gtcatgtccacatacaaaa	GAAAa	GCATGTGG	cacagttttaggacaaaag	gtgagcgg
*****	*****	*****	*****	*****	*****	*****

id=284864 gene=ENSG00000116350 name=SRSF4 segment=chr1_29492402_29492576_-1 type=AN VIEW

Figure 87:



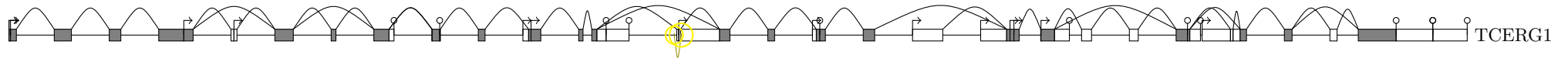
H. Sap	ctttgaag	gtggggaagat...119...	ggtaatggtgagccctgaag	TCGCacCCCAGcTCTG	ccactcagtgagcacgg	gtaagtca
R. Mac	ctttgaag	gtggggaagat...119...	ggtaatggtgagccctgaag	TCGCacCCCAGcTCTG	ccactcagtgagcacgg	gtaagtca
P. Tro	ctttgaag	gtggggaagat...119...	ggtaatggtgagccctgaag	TCGCacCCCAGcTCTG	ccactcagtgagcacgg	gtaagtca
P. Abe	ctttgaag	gtggggaagat...119...	ggtaatggtgagccctgaag	TCGCacCCCAGcTCTG	ccactcagtgagcacgg	gtaagtca
C. Jac	ctttgaag	gtggggaagat...119...	ggtaatggtgagccctgaag	TCGCacCCCAGcTCTG	ccactcagtgagcacgg	gtaagtca
C. Por	ctttgaag	gtggggaagat...120...	ggtaatggtgagccctgaag	TCGCacCCCAGcTCTG	ccactcagtgagcacgg	gtaagtca
O. Cun	ctttgaag	gtggggaagat...118...	ggtaatggtgagccctgaag	TCGCacCCCAGcTCTG	ccactcagtgagcacgg	gtaagtca
C. Fam	ctttgaag	gtggggaagat...119...	ggtaactggtgagccctgaag	TCGCacCCCAGcTCTG	ccactcagtgagcacgg	gtaagtca
F. Cat	ctttgaag	gtggggaagac...119...	ggtaactggtgagccctgaag	TCGCacCCCAGcTCTG	ccactcagtgagcacgg	gtaagtca
B. Tau	ctttgaag	gtggggaagat...119...	ggtaactggtgagccctgaag	TCGCacCCCAGcTCTG	ccactcagtgagcacgg	gtaagtca
E. Cab	ctttgaag	gtggggaagat...119...	ggtaactggtgagccctgag	TCGCacCCCAGcTCTG	ccactcagtgagcacgg	gtaagtca
S. Sus	ctttgaag	gtggggaagat...119...	ggtaactggtgagccctgaag	TCGCacCCCAGcTCTG	ccactcagtgagcacgg	gtaagtca
O. Avi	ctttgaag	gtggggaagat...119...	ggtaactggtgagccctgaag	TCGCacCCCAGcTCTG	ccactcagtgagcacgg	gtaagtca
L. Afr	ctttgaag	gtggggaagat...119...	ggtaactggtgagccctgaag	TCGCacCCCAGcTCTG	ccactcagtgagcacgg	gtaagtca
*****	*****	*****	**** ***** ** *****	*****	*****	*****

id=284862 gene=ENSG00000116350 name=SRSF4 segment=chr1_29493241_29493424_-1 type=AN

H. Sap	attaaaag	aatcctttgagg-...105...	cgaccgcaacctttcccat	TAGAcCTGGGtgGTGA	ggatccaagggttagacacagatgagattaactgaaatag	gtgcctga
R. Mac	attaaaag	aatcctttgagg-...105...	cgaccgcaacctttcccat	TAGAcCTGGGtgGTGA	ggatccaagggttagacacagatgagattaactgaaatag	gtgcctga
P. Tro	attaaaag	aatcctttgagg-...105...	cgaccgcaacctttcccat	TAGAcCTGGGtgGTGA	ggatccaagggttagacacagatgagattaactgaaatag	gtgcctga
P. Abe	attaaaag	aatcctttgagg-...105...	cgaccgcaacctttcccat	TAGAcCTGGGtgGTGA	ggatccaagggttagacacagatgagattaactgaaatag	gtgcctga
C. Jac	attaaaag	aatcctttgagg-...105...	cgaccgcaacctttcccat	TAGAcCTGGGtgGTGA	ggatccaagggttagacacagatgagattaactgaaatag	gtgcctga
C. Por	attaaaag	attcctttgagg-...105...	cgaccgcaacctttcccat	TAGAcCTGGGtgGTGA	ggatcccagggttagacacagatgagattaactgaaatag	gtgcctga
O. Cun	attaaaag	aatcctttgagg-...105...	cgaccgcaacctttcccat	TAGAcCTGGGtgGTGA	ggatccaagggttagacacagatgagattaactgaaatag	gtgcctga
C. Fam	attaaaag	aatcctttgagg-...104...	cgaccgcaacctttcccat	TAGAcCTGGGtgGTGA	ggatccaagggttagacacagatgagattaactgaaatag	gtgcctga
F. Cat	attaaaag	aatcctttgagg-...104...	cgaccgcaacctttcccat	TAGAcCTGGGtgGTGA	ggatccaagggttagacacagatgagattaactgaaatag	gtgcctga
B. Tau	attaaaag	aatcctttgagg-...105...	cgaccgcaacctttcccat	TAGAcCTGGGtgGTGA	ggatccaagggttagacacagatgagattaactgaaatag	gtgcctga
E. Cab	attaaaag	aatcctttgagg-...105...	cgaccgcaacctttcccat	TAGAcCTGGGtgGTGA	ggatccaagggttagacacagatgagattaactgaaatag	gtgcctga
S. Sus	attaaaag	aatcctttgagg-...105...	cgaccgcaacctttcccat	TAGAcCTGGGtgGTGA	ggatccaagggttagacacagatgagattaactgaaatag	gtgcctga
O. Avi	attaaaag	aa-cctttgaggc-...104...	cgaccgcaacctttcccat	TAGAcCTGGGtgGTGA	ggatccaagggttagacacagatgagattaactgaaatag	gtgcctga
L. Afr	attaaaag	aatcctttgagg-...105...	cgaccgcaacctttcccat	TAGAcCTGGGtgGTGA	ggatccaagggttagacacagatgagattaactgaaatag	gtgcctga
*****	*****	*****	*****	*****	*****	*****

id=284871 gene=ENSG00000116350 name=SRSF4 segment=chr1_29486376_29486570_-1 type=AN VIEW

Figure 88:



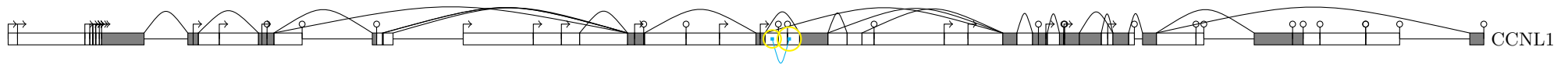
H.Sap	ggtgagga	gagaaccataa...552..	tttaggttggttttaattg	TTTGT	CTTATAGA	caactctgtaagggttttaactgctttatcag	gagaatgt
R.Mac	ggtgagga	gtgaaccataa...550..	tttaggttggttttaattg	TTTGT	CTTATAGA	caactctgtaagggttttaactgctttatcag	gagaatgt
P.Tro	ggtgagga	gagaaccataa...551..	tttaggttggttttaattg	TTTGT	CTTATAGA	caactctgtaagggttttaactgctttatcag	gagaatgt
P.Abe	ggtgagga	gagaaccataa...551..	tttaggttggttttaattg	TTTGT	CTTATAGA	caactctgtaagggttttaactgctttatcag	gagaatgt
C.Jac	ggtgagga	gtgaaccataa...553..	tttaggttggttttaattg	TTTGT	CTTATAGA	caactctgtaagggttttaactgctttatcag	gagaatgt
C.Por	ggtgagta	atagacacatga...531..	tttaggttggttttaattg	TTTGT	CTTATAGA	caactctgtaagggttttaactgctttatcag	gagaatgt
O.Cun	cctaaggc	gtgcatttga...555..	tttaggttggttttaattg	TTTGT	CTTATAGA	caactctgtaagggttttaactgctttatcag	gagaatgt
C.Fam	ggtgaaga	gggaacctgga...577..	tttaggttggttttaattg	TTTGT	CTTATAGA	caactctgtaagggttttaactgctttatcag	gagaatgt
B.Tau	gttgaaga	gggaaccctga...548..	tttaggttggttttaattg	TTTGT	CTTATAGA	caactctgtaagggttttaactgctttatcag	gagaatgt
E.Cab	ggtgaaga	gggaactcatga...572..	tttaggttggttttaattg	TTTGT	CTTATAGA	caactctgtaagggttttaactgctttatcag	gagaatgt
S.Sus	ggtgaaga	ggaaaccattg...561..	tttaggttggttttaattg	TTTGT	CTTATAGA	caactctgtaagggttttaactgctttatcag	gagaatgt
O.Avi	gttgaaga	gggaaccctga...564..	tttaggttggttttaattg	TTTGT	CTTATAGA	caactctgtaagggttttaactgctttatcag	gagaatgt
L.Afr	gctgagaa	gggagttcatga...623..	tttaggttggttttaattg	TTTGT	CTTATAGA	caactttgtaagggttttaactgctttatcag	gagaatgt
	*	*		*****	*****	*****	*****

id=141111 gene=ENSG00000113649 name=TCERG1 segment=chr5_145860082_145860712.1 type=IN

H.Sap	ctttatgt	ggattgccc	gagcttc	TCTAtt	TAG	GtACAAA	g
R.Mac	ctttatgt	ggattgccc	gagcttc	TCTAtt	TAG	GtACAAA	g
P.Tro	ctttatgt	ggattgccc	gagcttc	TCTAtt	TAG	GtACAAA	g
P.Abe	ctttatgt	ggattgccc	gagcttc	TCTAtt	TAG	GtACAAA	g
C.Jac	ctttatgt	ggattgccc	gagcttc	TCTAtt	TAG	GtACAAA	g
C.Por	ctttatgt	ggattgccc	gagcttc	TCTAtt	TAG	GtACAAA	g
O.Cun	ctttatgt	ggattgccc	gagcttc	TCTAtt	TAG	GtACAAA	g
C.Fam	ctttatgt	ggattgccc	gagcttc	TCTAtt	TAG	GtACAAA	g
B.Tau	ctttatgt	ggattgccc	gagcttc	TCTAtt	TAG	GtACAAA	g
E.Cab	ctttatgt	ggattgccc	gagcttc	TCTAtt	TAG	GtACAAA	g
S.Sus	ctttatgt	ggattgccc	gagcttc	TCTAtt	TAG	GtACAAA	g
O.Avi	ctttatgt	ggattgccc	gagcttc	TCTAtt	TAG	GtACAAA	g
L.Afr	ctttatgt	ggattgccc	gagcttc	TCTAtt	TAG	GtACAAA	g
	*****	*****	*****	*****	*****	*****	*****

id=141113 gene=ENSG00000113649 name=TCERG1 segment=chr5_145860739_145860763.1 type=AN VIEW

Figure 90:



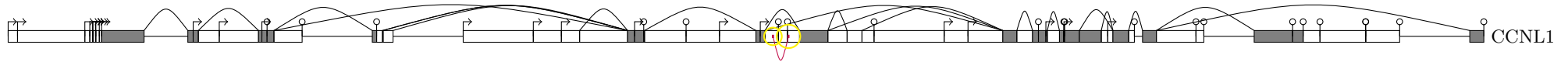
H. Sap	actgcctg	gtaagtca-----cttttttagatttctttcct	AGCCAGGAAAAACAGAAGCAGAAAT	AAAGT	aagtttcgttttcc-ctttccaaaataatgagataag-----	tt	tgtttggg
R. Mac	actgcctg	gtaagtca-----cttttttagatttctttcct	AGCCAGGAAAAACAGAAGCAGAAAT	AAAGT	aagtttcattttcc-ctttccaaaataatgagataag-----	tt	tgtttggg
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C. Jac	actgcctg	gtaagtca-----cttttttagatttctttcct	AGCCAGGAAAAACAGAAGCAGAAAT	AAAGT	aagtttcg-tttcc-ctttccaaaataatgagataag-----	tt	tgtttggg
M. Mus	actgcctg	gtaagttc-----ctcttttacattgcttcttt	AGTCAGGAAAAACAGAAGCAGAAAT	AAAGT	aagtttcatttttctctttccaaaataatgaaataag-----	tt	tgtttggg
R. Nor	actgcctg	gtaagttc-----cttttttacatttcttcttt	AGTCAGGAAAAACAGAAGCAGAAAT	AAAGT	aagtttcatttttctctttccaaaataatgaaataag-----	tt	tgtttggg
C. Por	actgcctg	gtaagttgTTTTTTTTTTTtacatttcactcct	AGCCAGGAAAAACAGAAGCAGAAAT	AAAGT	aagtttcattttt-c-tttccaaaataatgagataagtttgggtgttttt	tt	tgtttggg
O. Cun	actgcctg	gtaagttg-----cttttttacatttctttcct	AGCCAGGAAAAACAGAAGCAGAAAT	AAAGT	aagtttcattttcc-ctttccaaaataatgagataag-----	tt	tgtttggg
C. Fam	actgcctg	gtaagttg-----cttttttacatttctttcct	AGCCAGGAAAAACAGAAGCAGAAAT	AAAGT	aagtttcgttttcc-ctttccaaaataatgagaggag-----	tt	tgtttggg
F. Cat	actgcctg	gtaagttg-----cttttttacatttctttcct	AGCCAGGAAAAACAGAAGCAGAAAT	AAAGT	aagtttcattttcc-ctttccaaaataatgagaggag-----	tt	tgtttggg
B. Tau	actgcctg	gtaagttg-----cttttttacatttctttcct	AGCCAGGAAAAACAGAAGCAGAAAT	AAAGT	aagtttcattttcc-ctttccaaaataatgagataag-----	tt	tgtttggg
E. Cab	actgcctg	gtaagttg-----cttttttacatttctttcct	AGCCAGGAAAAACAGAAGCAGAAAT	AAAGT	aagtttcattttcc-cttttctaaaacaatgagatgag-----	tt	tgtttggg
L. Afr	actgcctg	gtaagttg-----cttttttacatttctttcct	AGCCAGGAAAAACAGAAGCAGAAAT	AAAGT	aagtttcgttttcc--tttccaa---aatgagataag-----	tt	tgtttggg
*****	*****	* ***** * * * * *	*** ***** * * * * *	*** * * * * *	***** * * * * *	**	***

id=773263 gene=ENSG00000163660 name=CCNL1 segment=chr3.156869871_156869965_-1 type=AN

H. Sap	gCTTATT	CTGCTTC	TGTTTCTTGGCT	tgactaattacttttaaatgg...33...ctttaattaaag	ggtagtcc
R. Mac	gCTTATT	CTGCTTC	TGTTTCTTGGCT	tgactaattacttttaaatgg...33...ctttaattaaag	ggtagtcc
P. Tro	gCTTATT	CTGCTTC	TGTTTCTTGGCT	tgactaattacttttaaatgg...33...ctttaattaaag	ggtagtcc
C. Jac	gCTTATT	CTGCTTC	TGTTTCTTGGCT	tgactaattacttttaaatgg...33...ctttaattaaag	ggtagtcc
M. Mus	gCTTATT	CTGCTTC	TGTTTCTTGGCT	tgactaattacttttaaatgg...33...ctttaattaaag	ggtagtcc
R. Nor	gCTTATT	CTGCTTC	TGTTTCTTGGCT	tgactaattacttttaaatgg...33...ctttaattaaag	ggtagtcc
C. Por	gCTTATT	CTGCTTC	TGTTTCTTGGCT	tgactagtacttttaaatgg...33...ctttaattaaag	ggtagtcc
O. Cun	gCTTATT	CTGCTTC	TGTTTCTTGGCT	tgactaattacttttaaatgg...33...ctttaattaaag	ggtagtcc
C. Fam	gCTTATT	CTGCTTC	TGTTTCTTGGCT	tgactaattgctttcaatgg...33...ctttaattaaag	ggtagtcc
F. Cat	gCTTATT	CTGCTTC	TGTTTCTTGGCT	tgactaattgctttcaatgg...33...ctttaattaaag	ggtagtcc
B. Tau	gCTTATT	CTGCTTC	TGTTTCTTGGCT	tgactaattacttttaaatgg...33...ctttaattaaag	ggtagtcc
E. Cab	gCTTATT	CTGCTTC	TGTTTCTTGGCT	tgactaattacttttaaatgg...33...ctttaattaaag	ggtagtcc
L. Afr	gCTTATT	CTGCTTC	TGTTTCTTGGCT	tgactaattacttttaaatgg...33...ctttaattaaag	ggtagtcc
*****	*****	*****	* * * * *	*****	*****

id=773265 gene=ENSG00000163660 name=CCNL1 segment=chr3.156869720_156869805_-1 type=AN VIEW

Figure 92:



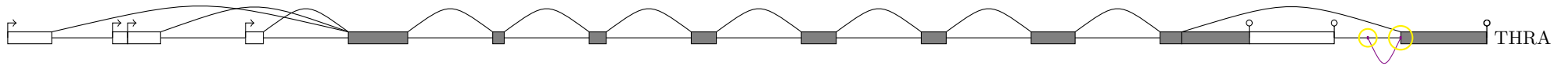
H. Sap	actgcctg	gtaagtca	----cttttttagatttctttcctagccaggaaaaca	GAAGCAGAAATAAAGTAaGTTTcGTTTT	-ccctttccaaaataatgagataag	-----tt	tgtttggg-	
R. Mac	actgcctg	gtaagtca	----cttttttagatttctttcctagccaggaaaaca	GAAGCAGAAATAAAGTAaGTTTcATTTT	-ccctttccaaaataatgagataag	-----tt	tgtttggg-	
P. Tro	actgcctg	gtaagtca	----cttttttagatttctttcctagccaggaaaaca	GAAGCAGAAATAAAGTAaGTTTcGTTTT	-ccctttccaaaataatgagataag	-----tt	tgtttggg-	
C. Jac	actgcctg	gtaagtca	----cttttttagatttctttcctagccaggaaaaca	GAAGCAGAAATAAAGTAaGTTTcGTTTT	-ccctttccaaaataatgagataag	-----tt	tgtttggg-	
M. Mus	actgcctg	gtaagttc	----ctctttacattgcttcttttagtcaggaaaaca	GAAGCAGAAATAAAGTAaGTTTcATTTTT	ctctttccaaaataatgaaataag	-----tt	tgtttggg-	
R. Nor	actgcctg	gtaagttc	----ctttttacatttcttcttttagtcaggaaaaca	GAAGCAGAAATAAAGTAaGTTTcATTTT	-ccctttccaaaataatgaaataag	-----tt	tgtttgtg-	
C. Por	actgcctg	gtaagttg	-----ctttttacatttctttcctagccaggaaaaca	GAAGCAGAAATAAAGTAaGTTTcATTTT	-ccctttccaaaataatgagataag	tttgggtt	tgtttgt-	
O. Cun	actgcctg	gtaagttg	-----ctttttacatttctttcctagccaggaaaaca	GAAGCAGAAATAAAGTAaGTTTcATTTT	-ccctttccaaaataatgagataag	-----tt	tgtttggg	
C. Fam	actgcctg	gtaagttg	-----ctttttacatttctttcctagccaggaaaaca	GAAGCAGAAATAAAGTAaGTTTcGTTTT	-ccctttccaaaataatgagaggag	-----tt	tgtttggg-	
F. Cat	actgcctg	gtaagttg	-----ctttttacatttctttcctagccaggaaaaca	GAAGCAGAAATAAAGTAaGTTTcATTTT	-ccctttccaaaataatgagaggag	-----tt	tgtttggg-	
B. Tau	actgcctg	gtaagttg	-----ctttttacatttctttcctagccaggaaaaca	GAAGCAGAAATAAAGTAaGTTTcATTTT	-ccctttccaaaataatgagataag	-----tt	tgtttggg-	
E. Cab	actgcctg	gtaagttg	-----ctttttacatttctttcctagccaggaaaaca	GAAGCAGAAATAAAGTAaGTTTcATTTT	-ccctttcaaaataatgagatgag	-----tt	tgtttggg-	
O. Avi	actgcctg	gtaagttg	-----ctttttacatttctttcctagccaggaaaaca	GAAGCAGAAATAAAGTAaGTTTcATTTT	-ccctttccaaaataatgagataag	-----tt	tgtttggg-	
L. Afr	actgcctg	gtaagttg	-----ctttttacatttctttcctagccaggaaaaca	GAAGCAGAAATAAAGTAaGTTTcGTTTT	-ccctttccaa---aatgagatac	-----tt	tgtttggg-	
	*****	*****	* **** * * *	*** *****	***	*** **	***** * *****	**

id=773263 gene=ENSG00000163660 name=CCNL1 segment=chr3.156869871_156869965_-1 type=AN

H. Sap	gataagtt	tg--tttggggcttttctgt	---tgttttt	---tgttttgttt	---ttaaacc	aaAAGGTA	aaTGCTT	CTGCTTC
R. Mac	gataagtt	tg--tttggggcttttctgt	---tgttttt	tgttttgttt	---ttaaacc	aaAAGGTA	aaTGCTT	CTGCTTC
P. Tro	gataagtt	tg--tttggggcttttctgt	---tgttttt	tgttttgttt	---ttaaacc	aaAAGGTA	aaTGCTT	CTGCTTC
C. Jac	gataagtt	tg--tttggggcttttctgt	---tgttgtt	---tgtttt	---ttaaacc	aaAAGGTA	aaTGCTT	CTGCTTC
M. Mus	aataagtt	tg--tttggggcattttgtgg	---ttttgttt	tgttttgttt	---ttaaacc	aaAAGGTA	aaTGCTT	CTGCTTC
R. Nor	aataagtt	tg--tttggggcattttgtgg	---ttttgttt	tgttttgttt	---ttaaacc	aaAAGGTA	aaTGCTT	CTGCTTC
C. Por	---tgttt	tttgggttcttttctgt	---ctttttt	---tgtttt	aaAAGGTA	aaTGCTT	CTGCTTC	
O. Cun	gat-agtt	tg--tttggggcttttctgt	---ttttttt	---ttt	---ttaaacc	aaAAGGTA	aaTGCTT	CTGCTTC
C. Fam	gaggagtt	tg--tttgggtgcttttctgt	---ttttttt	---ttt	---ttaaacc	aaAAGGTA	aaTGCTT	CTGCTTC
F. Cat	gaggagtt	tg--tttgggtgcttttctgt	---ttttttt	---ttt	---ttaaacc	aaAAGGTA	aaTGCTT	CTGCTTC
B. Tau	gataagtt	tg--tttgggtgcttttctgt	---ttttttt	---ttt	---ttaaacc	aaAAGGTA	aaTGCTT	CTGCTTC
E. Cab	gatgagtt	tg--tttgggtgcttttctgt	---ttttttt	---ttt	---gttaatt	aaAAGGTA	aaTGCTT	CTGCTTC
O. Avi	gataagtt	tg--tttgggtgcttttctgt	---ttttttt	---ttt	---ttaaacc	aaAAGGTA	aaTGCTT	CTGCTTC
L. Afr	gataagtt	tg--tttggggcattttctgt	---ttttttt	---ttt	---ttaaacc	aaAAGGTA	aaTGCTT	CTGCTTC
	**	*	*** *	*** *	**	***	*** *****	*****

id=773264 gene=ENSG00000163660 name=CCNL1 segment=chr3.156869806_156869870_-1 type=AN VIEW

Figure 93:



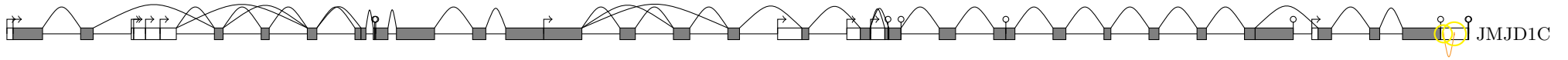
H. Sap	gaaaataa	cccccttgggca--...152...ctcagctgtgaactattgga	TTTGAGACaGGAAc	AGAACAAATC	AGAG	----	ggccaggggagggttgtggg...148...cgtctcgtaaag	gagagaga
R. Mac	gaaaataa	cccccttgggca--...151...ctcagctgtgaactcttggga	TTTGAGACaGGAAc	AGAACAAATC	AGGG	----	ggccaggggagggttgtggg...148...cgtctcgtaaag	gagagaga
M. Mus	gaaaataa	cccccttgggca--...172...ctcagctgtgaactattgga	TTTGAGACaGGAAc	AGAACAAATC	AGGG	----	ggccaggggagggttgtggg...145...cgtctcgtaaag	gagagaga
R. Nor	gaaaataa	cccc--gggcacc...154...ctcagctgtgaactattgga	TTTGAGACaGGAAc	AGAACAAATC	AGGG	----	ggccaggggagggttgtggg...140...cgtctcgtaaag	gagagaga
C. Por	gaaaataa	cccccttgggca--...168...ctcagctgtgaactattgga	TTTGAGACaGGAAc	AGAACAAATC	AGGG	----	ggccaggggagggttgtggg...155...cgtctcgtaaag	gagagaga
O. Cun	gaaaatca	cccccttgggca--...152...ctcagctcggaactattgga	TTTGAGACaGGAAc	AGAACAAATC	AGGG	----	ggccaggggagggttgtggg...153...cgtctcgtaaag	gagagaga
C. Fam	gaaaataa	cccccttgggca--...154...ctcagctgtgaactattgga	TTTGAGACaGGAAc	AGAACAAATC	AGGG	----	ggccaggggagggttgtggg...145...cgtctcgtaaag	gagagaga
F. Cat	gaaaataa	cccccttgggca--...151...ctcagctgtgaactattgga	TTTGAGACaGGAAc	AGAACAAATC	AGGG	----	ggccaggggagggttgtggg...153...cgtctcgtaaag	gagagaga
B. Tau	gaaaataa	cccccttgggca--...163...ctcagctgtgaactattgga	TTTGAGACaGGAAc	AGAACAAATC	AGGG	----	ggccaggggagggttgtggg...152...cgtctcgtaaag	gagagaga
E. Cab	gaaaataa	cccccttgggca--...152...ctcagctgtgaactattgga	TTTGAGACaGGAAc	AGAACAAATC	AGGG	----	ggccaggggagggttgtggg...145...cgtctcgtaaag	gagagaga
O. Avi	gaaaataa	cccccttgggca--...164...ctcagctgtgaactattgga	TTTGAGACaGGAAc	AGAACAAATC	AGGG	----	ggccaggggagggttgtggg...152...cgtctcgtaaag	gagagaga
L. Afr	gaaaataa	cccccttgggca--...151...ctcagctgtgaactattgga	TTTGAGACaGGAAc	AGAACAAATC	AGGG	----	ggccaggggagggttgtggg...155...cgtctcgtaaag	gagagaga
	*****	***** * **	*****	*****	*****	*****	*****	*****

id=480137 gene=ENSG00000126351 name=THRA segment=chr17_38248881.38249272.1 type=IN

H. Sap	gaaaataa	cccccttgggca--...327...ttataacaatataaataaga	TTCTGGTTTg	TTTTcc	TTTTTCGTCT	cgTAAAag	gagagaga
R. Mac	gaaaataa	cccccttgggca--...326...ttataacaatataaataaga	TTCTGGTTTg	TTTTcc	TTTTTCGTCT	cgTAAAag	gagagaga
M. Mus	gaaaataa	cccccttgggca--...345...ttataacaatataaataaga	TTCTGGTTTg	TTTTcc	TTTTTCGTCT	cgTAAAag	gagagaga
R. Nor	gaaaataa	cccc--gggcacc...322...ttataacaatataaataaga	TTCTGGTTTg	TTTTcc	TTTTTCGTCT	cgTAAAag	gagagaga
C. Por	gaaaataa	cccccttgggca--...350...ttataacaatataaataaga	TTCTGGTTTg	TTTTcc	TTTTTCGTCT	cgTAAAag	gagagaga
O. Cun	gaaaatca	cccccttgggca--...331...ttataacaatataaataaga	TTCTGGTTTg	TTTTcc	TTTTTCGTCT	cgTAAAag	gagagaga
C. Fam	gaaaataa	cccccttgggca--...326...ttataacaatataaataaga	TTCTGGTTTg	TTTTcc	TTTTTCGTCT	cgTAAAag	gagagaga
F. Cat	gaaaataa	cccccttgggca--...331...ttataacaatataaataaga	TTCTGGTTTg	TTTTcc	TTTTTCGTCT	cgTAAAag	gagagaga
B. Tau	gaaaataa	cccccttgggca--...342...ttataacaatataaataaga	TTCTGGTTTg	TTTTcc	TTTTTCGTCT	cgTAAAag	gagagaga
E. Cab	gaaaataa	cccccttgggca--...324...ttataacaatataaataaga	TTCTGGTTTg	TTTTcc	TTTTTCGTCT	cgTAAAag	gagagaga
O. Avi	gaaaataa	cccccttgggca--...343...ttataacaatataaataaga	TTCTGGTTTg	TTTTcc	TTTTTCGTCT	cgTAAAag	gagagaga
L. Afr	gaaaataa	cccccttgggca--...333...ttataacaatataaataaga	TTCTGGTTTg	TTTTcc	TTTTTCGTCT	cgTAAAag	gagagaga
	*****	***** * **	*****	*****	*****	*****	*****

id=480137 gene=ENSG00000126351 name=THRA segment=chr17_38248881.38249272.1 type=IN VIEW

Figure 94:



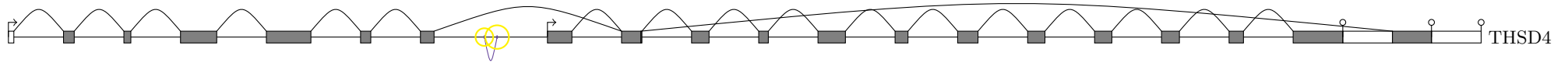
H. Sap	aatcgcac	agcagtc	atgtc	ataatcagaAAATTac	TGCCAAAT	aattgt	aaaattgt	aaagt...292...aaggactttatc	aaaaattg
R. Mac	aatcgcac	agcagtc	atgtc	ataatcagaAAATTac	TGCCAAAT	aattgt	aaaattgt	aaagt...292...aaggactttatc	aaaaattg
P. Tro	aatcgcac	agcagtc	atgtc	ataatcagaAAATTac	TGCCAAAT	aattgt	aaaattgt	aaagt...292...aaggactttatc	aaaaattg
P. Abe	aatcgcac	agcagtc	atgtc	ataatcagaAAATTac	TGCCAAAT	aattgt	aaaattgt	aaagt...292...aaggactttatc	aaaaattg
C. Jac	aatcgcac	agcagtc	atgtc	ataatcagaAAATTac	TGCCAAAT	aattgt	aaaattgt	aaagt...292...aaggactttatc	aaaaattg
M. Mus	gattgcac	agcagtc	acgtc	ataatcagaAAATTac	TGCCAAAT	aattgt	aagaagct	aaagt...291...aaagactttatc	aagaagct
R. Nor	gattgcac	agcagtc	atgtc	ataatcagaAAATTac	TGCCAAAT	aactgt	aagaactt	aaagt...288...aaagactttatc	aagaactt
C. Por	aatcgcac	agcagtc	atgtc	ataatcagaAAATTac	TGCCAAAT	aattgt	agaaattg	aaagt...291...aaagactttatc	agaaattg
O. Cun	aatcgcac	agcagtc	atgtt	gtaatcagaAAATTac	TGCCAAAT	aactgt	aaaaattg	aaagt...294...aaggactttatc	aaaaattg
C. Fam	aatcgcac	agcattc	atgtc	ataatcagaAAATTac	TGCCAAAT	aattgt	aaaaatg	aaagt...297...aaagactttatc	aaaaatg
B. Tau	aatcgcac	agcatac	atgtc	ataatcagaAAATTac	TGCCAAAT	aattgt	aaaaatgg	aaagt...287...aaggactttatc	aaaaatgg
E. Cab	aatcgcac	agcattc	atgtc	ataatcagaAAATTac	TGCCAAAT	aattgt	aaaaattg	aaagt...296...aaggactttatc	aaaaattg
S. Sus	aatcgcac	agcatac	atgtc	ataatcagaAAATTac	TGCCAAAT	aattgt	aaaaattt	aaagt...293...aaggactttatc	aaaaattt
O. Avi	aatcgcac	agcatac	atgtc	ataatcagaAAATTac	TGCCAAAT	aattgt	aaaactgg	aaagt...287...aaggactttatc	aaaactgg
L. Afr	aatcgcac	agcagtc	atgtc	atagtcagaAAATTac	TGCCAAAT	aattgt	aaaagttg	aaagt...294...aaagactttacg	aaaagttg
	** ** ** *	****	** ** *	** ** ** *	*****	*****	** ** ** *	*****	* *

id=167762 gene=ENSG00000171988 name=JMJD1C segment=chr10_64926990_64927349_-1 type=EN

H. Sap	aatcgcac	agcagtc	atgtc	...133...aatttatt	aaattgtctc	ATTTtGGTAaAATTT	atgtg	aaacttttaagctaa...148...aaggactttatc	aaaaattg
R. Mac	aatcgcac	agcagtc	atgtc	...133...aatttatt	aaattgtctc	ATTTtGGTAaAATTT	atgtg	aaacttttaagctaa...148...aaggactttatc	aaaaattg
P. Tro	aatcgcac	agcagtc	atgtc	...133...aatttatt	aaattgtctc	ATTTtGGTAaAATTT	atgtg	aaacttttaagctaa...148...aaggactttatc	aaaaattg
P. Abe	aatcgcac	agcagtc	atgtc	...133...aatttatt	aaattgtctc	ATTTtGGTAaAATTT	atgtg	aaacttttaagctaa...148...aaggactttatc	aaaaattg
C. Jac	aatcgcac	agcagtc	atgtc	...133...aatttatt	aaattgtctc	ATTTtGGTAaAATTT	atgtg	aaacttttaagctaa...148...aaggactttatc	aaaaattg
M. Mus	gattgcac	agcagtc	acgtc	...133...aatttatt	aaattgtctc	ATTTtGGTAaAATTT	atgtg	aaagtttaagctaa...147...aaagactttatc	aagaagct
R. Nor	gattgcac	agcagtc	atgtc	...132...aatttatt	aaattgtctc	ATTTtGGTAaAATTT	atgtg	aaagtttaagctaa...145...aaagactttatc	aagaactt
C. Por	aatcgcac	agcagtc	atgtc	...133...aatttatt	aaattgtctc	ATTTtGGTAaAATTT	atgtg	aaagtttaagctaa...147...aaagactttatc	agaaattg
O. Cun	aatcgcac	agcagtc	atgtt	...135...aatttatt	aaattgtctc	ATTTtGGTAaAATTT	atgtg	aaacttttaagctaa...148...aaggactttatc	aaaaattg
C. Fam	aatcgcac	agcattc	atgtc	...133...aatttatt	aaattgtctc	ATTTtGGTAaAATTT	atgtg	aaacttttaagctaa...153...aaagactttatc	aaaaatg
B. Tau	aatcgcac	agcatac	atgtc	...129...aatttatt	aaattgtctc	ATTTtGGTAaAATTT	atgtg	aaacttttaagctaa...147...aaggactttatc	aaaaatgg
E. Cab	aatcgcac	agcattc	atgtc	...133...aatttatt	aaattgtctc	ATTTtGGTAaAATTT	atgtg	aaacttttaagctaa...152...aaggactttatc	aaaaattg
S. Sus	aatcgcac	agcatac	atgtc	...134...aatttatt	aaattgtctc	ATTTtGGTAaAATTT	atgtg	aaacttttaagctaa...148...aaggactttatc	aaaaattt
O. Avi	aatcgcac	agcatac	atgtc	...129...aatttatt	aaattgtctc	ATTTtGGTAaAATTT	atgtg	aaacttttaagctaa...147...aaggactttatc	aaaactgg
L. Afr	aatcgcac	agcagtc	atgtc	...132...aatttatt	aaattgtctc	ATTTtGGT-AAATTT	atgtg	aaacttttaagctaa...152...aaagactttacg	aaaagttg
	** ** ** *	****	** ** *	*****	*****	*****	** ** ** *	*****	* *

id=167762 gene=ENSG00000171988 name=JMJD1C segment=chr10_64926990_64927349_-1 type=EN VIEW

Figure 95:



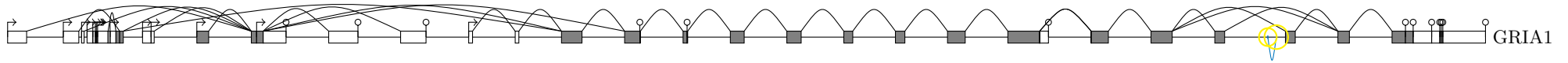
H. Sap	agtgcaag	gtaagtgcccc...4793...ggcgtgcttaccttggaaacc	CTTTTCATGAATGAgaccagatgcagaactccac-...118...ccagttttcttc	agaacaga
R. Mac	agtgcaag	gtaagtgcccct...4793...gggacttaccttggaaacc	CTTTTCATGAATGAgaccagatgcagaactccac-...118...ccagttttcttc	agaacaga
P. Tro	agtgcaag	gtaagtgcccc...4793...ggcgtgcttaccttggaaacc	CTTTTCATGAATGAgaccagatgcagaactccac-...118...ccagttttcttc	agaacaga
P. Abe	agtgcaag	gtaagtgcccc...4794...ggcgtgcttaccttggaaacc	CTTTTCATGAATGAgaccagatgcagaactccac-...117...ccagttttcttc	agaacaga
C. Jac	agtgcaag	gtaagtgcccct...4793...ggagtgttaccttggaaacc	CTTTTCATGAATGAgaccagatgcagaactccac-...118...ccagttttcttc	agagcaga
M. Mus	agtgcaag	gtaagtgcgatg...4793...tgagtgttaccttggacc	CTTTTCATGAATGAgaccagatgcac-gctccaca...118...ccagttttcttc	agagcaga
R. Nor	agtgcaag	gtaagtgcggct...4793...gaagtgttaccttggagcc	CTTTTCATGAATGAgaccagatgcac-actccaca...118...ccagttttcttc	agagcaga
C. Por	agtgcaag	gtaagtgtccat...4796...gaagcacttaccttgaagcc	CTTTTCATGAATGAgaccagatgcaaggctccac-...115...ccagttttcttc	agagcaga
C. Fam	agtgcaag	gtaagtgcccgg...4793...ggagcgcttcttggagcc	CTTTTCATGAATGAgaccagatgcagaactccac-...118...ccagttttcttc	agagcaga
F. Cat	agtgcaag	gtaagtgccccg...4793...ggagtgttaccttggggcc	CTTTTCATGAATGAgaccagatgcagaactccac-...118...ccagttttcttc	agagcaga
B. Tau	agtgcaag	gtaagtgccccg...4793...ggagtgttaccttggagcc	CTTTTCATGAATGAgaccagatgcagaactccac-...118...ccagttttcttc	agagcaga
E. Cab	agtgcaag	gtaagtaccct...4793...ggagtgttaccttggagcc	CTTTTCATGAATGAgaccagatgcagaactccac-...118...ccagttttcttc	agagcaga
S. Sus	agtgcaag	gtgagtgcccc...4793...gaagcacttaccttggagcc	CTTTTCATGAATGAgaccagatgcagaactgcac-...118...ccagttttcttc	agagcaga
L. Afr	agtgcacg	gtaagtgcccct...4793...gaagtgttaccttggagcc	CTTTTCATGAATGAgaccagatgcagaactccac-...118...ccagttttcttc	agagccga
	***** *	** **	* ** * ***** * ** **	***** * ** * **

id=630512 gene=ENSG00000187720 name=THSD4 segment=chr15_71704163_71839574_1 type=IN

H. Sap	agtgcaag	gtaagtgcccc...4921...cctccccagccgggagaag	TTATTaCATGAAGAGatcagcttaccagttttcttc	agaacaga
R. Mac	agtgcaag	gtaagtgcccct...4921...cctccccagccgggagaag	TTATTaCATGAAGAGatcagcttaccagttttcttc	agaacaga
P. Tro	agtgcaag	gtaagtgcccc...4921...cctccccagccgggagaag	TTATTaCATGAAGAGatcagcttaccagttttcttc	agaacaga
P. Abe	agtgcaag	gtaagtgcccc...4921...cctccccagccgggagaag	TTATTaCATGAAGAGatcagcttaccagttttcttc	agaacaga
C. Jac	agtgcaag	gtaagtgcccct...4921...cctccccagccgggagaag	TTATTaCATGAAGAGatcagcttaccagttttcttc	agagcaga
M. Mus	agtgcaag	gtaagtgcgatg...4921...cctccccagccaggagaag	TTATTaCATGAAGAGatcagcttaccagttttcttc	agagcaga
R. Nor	agtgcaag	gtaagtgcggct...4921...cctccccagccaggagaag	TTATTaCATGAAGAGatcagcttaccagttttcttc	agagcaga
C. Por	agtgcaag	gtaagtgtccat...4921...cctccccagccgggagaag	TTATTaCATGAAGAGatcagcttaccagttttcttc	agagcaga
C. Fam	agtgcaag	gtaagtgcccgg...4921...cctccccagccgggagaag	TTATTaCATGAAGAGatcagcttaccagttttcttc	agagcaga
F. Cat	agtgcaag	gtaagtgccccg...4921...cctccccagccgggagaag	TTATTaCATGAAGAGatcagcttaccagttttcttc	agagcaga
B. Tau	agtgcaag	gtaagtgccccg...4921...cctccccagccgggagaag	TTATTaCATGAAGAGatcagcttaccagttttcttc	agagcaga
E. Cab	agtgcaag	gtaagtaccct...4921...cctccccagccgggagaag	TTATTaCATGAAGAGatcagcttaccagttttcttc	agagcaga
S. Sus	agtgcaag	gtgagtgcccc...4921...cctccccagctgggagaag	TTATTaCATGAAGAGatcagcttaccagttttcttc	agagcaga
L. Afr	agtgcacg	gtaagtgcccct...4921...cctccccagctgggagaag	TTATTaCATGAAGAGatcagcttaccagttttcttc	agagccga
	***** *	** **	***** * ** * **	***** * ** * **

id=630512 gene=ENSG00000187720 name=THSD4 segment=chr15_71704163_71839574_1 type=IN VIEW

Figure 96: CS=8.4



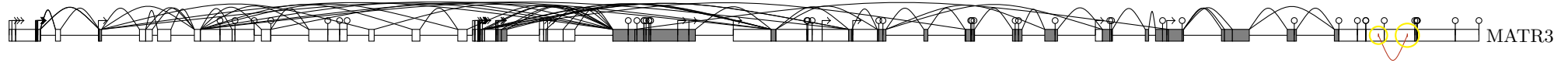
H.Sap	attccaag	gtcagccccagt	----	486	..	acgttgctggttactcaaa	TGATAt	AGTGATACTC	atcttgctatactagagaaa	...	174	..	ccctggttgaag	aggtcccg
R.Mac	attccaag	gtcagccccagt	----	487	..	acgttgctggttactcaaa	TGATAt	AGTGATACTC	atcttgctttgctagagaaa	...	174	..	ccctggttgaag	aggtcccg
P.Tro	attccaag	gtcagccccagt	----	486	..	acgttgctggttactcaaa	TGATAt	AGTGATACTC	atcttgctatactagagaaa	...	174	..	ccctggttgaag	aggtcccg
P.Abe	attccaag	gtcagccccagt	----	337	..	acgttgctggttactcaaa	TGATAt	AGTGATACTC	atcttgctatgctagagaaa	...	174	..	ccctggttgaag	aggtcccg
C.Jac	attccaag	gtcagccccagt	----	491	..	acgttgctggttactcaaa	TGATAt	AGTGATACTC	atcttgctatgctagagaaa	...	174	..	ccctggttgaag	aggtcccg
M.Mus	actccaag	gtcagccccagt	----	467	..	acgttgctggttactctaa	TGATAt	AGTGATACTC	atcttgctgtgctagaggaa	...	177	..	acctggttgaag	aggtcccg
C.Por	ttttaaag	---aaatccagtaaa	...	605	..	-cgttgctggttactcaaa	TGATAt	AGTGATACTC	atcttgctatgctagagaaa	...	289	..	tccggaagtaag	gtcagtc
O.Cun	attccaag	gtcagccccagt	----	481	..	acgttgctggttactcaaa	TGATAt	AGTGATACTC	atcttgctatgctagaggaa	...	174	..	ccctggttgaag	aggtcccg
C.Fam	actccaag	gtcagccccagt	----	486	..	acgttgctggttactcaaa	TGATAt	AGTGATACTC	atcttgctatgctagaggaa	...	175	..	ccctggttgaag	aggtcccg
F.Cat	attccaag	gtcagccccagt	----	486	..	acgttgctggttactcaaa	TGATAt	AGTGATACTC	atcttgctatgctagaggaa	...	175	..	ccctggttgaag	aggtcccg
B.Tau	attccaag	gtcagccccagt	----	478	..	acgttgctggttactcaaa	TGATAt	AGTGATACTC	atcttgctatgctagaggaa	...	175	..	ccctggttgaag	aggtcccg
E.Cab	attccaag	gtcagccccagt	----	479	..	acgttgctggttactcaaa	TGATAt	AGTGATACTC	atcttgctatgctagaggaa	...	175	..	ccctggttgaag	aggtcccg
L.Afr	attccaag	gtcagccccagt	----	491	..	acgttgctggttactcaaa	TGATAt	AGTGATACTC	atcttgctatgctagagga	...	177	..	ccctggttgaag	aggtcccg
							*	*	*	*	*	*	*	*

id=469592 gene=ENSG00000155511 name=GRIA1 segment=chr5_153174296_153175035_1 type=IN

H.Sap	attccaag	gtcagccccagt	----	585	..	gggccagatggagtatttta	GAGTATCACT	TGTCA	-gtgcatatgatcttgttcaa	...	75	..	ccctggttgaag	aggtcccg
R.Mac	attccaag	gtcagccccagt	----	586	..	gggccagatggagtatttta	GAGTATCACT	TGTCA	-gtgcatatgctcttgttcaa	...	75	..	ccctggttgaag	aggtcccg
P.Tro	attccaag	gtcagccccagt	----	585	..	gggccagatggagtatttta	GAGTATCACT	TGTCA	-gtgcatatgatcttgttcaa	...	75	..	ccctggttgaag	aggtcccg
P.Abe	attccaag	gtcagccccagt	----	436	..	gggccagatggagtatttta	GAGTATCACT	TGTCA	-gtgcatatgatcttgttcaa	...	75	..	ccctggttgaag	aggtcccg
C.Jac	attccaag	gtcagccccagt	----	590	..	gggccagatggagtatttta	GAGTATCACT	TGTCA	-gtgcatatgctcttgttcaa	...	75	..	ccctggttgaag	aggtcccg
M.Mus	actccaag	gtcagccccagt	----	566	..	gggccagatggagtactgta	GAGTATCACT	TGTCA	-agtgcataatgctcttgttca	...	78	..	acctggttgaag	aggtcccg
C.Por	ttttaaag	---aaatccagtaaa	...	703	..	gggccagatggagtatttta	GAGTATCACT	TGTCA	-cgtgcatatgctcttgttca	...	191	..	tccggaagtaag	gtcagtc
O.Cun	attccaag	gtcagccccagt	----	580	..	gggacagatggagtatttta	GAGTATCACT	TGTCA	-gtgcatatgctattgttcaa	...	75	..	ccctggttgaag	aggtcccg
C.Fam	actccaag	gtcagccccagt	----	585	..	gggccagatggagtatttta	GAGTATCACT	TGTCA	-gtgcatatgctcttgttcaa	...	76	..	ccctggttgaag	aggtcccg
F.Cat	attccaag	gtcagccccagt	----	585	..	gggccagatggagtatttta	GAGTATCACT	TGTCA	-gtgcatatgctcttgttcaa	...	76	..	ccctggttgaag	aggtcccg
B.Tau	attccaag	gtcagccccagt	----	577	..	agctccaatggagtatttta	GAGTATCACT	TGTCA	-gtgcatatgctcttgttcaa	...	76	..	ccctggttgaag	aggtcccg
E.Cab	attccaag	gtcagccccagt	----	578	..	gggccagatggagtatttta	GAGTATCACT	TGTCA	-gtgcatatgctcttgttcaa	...	76	..	ccctggttgaag	aggtcccg
L.Afr	attccaag	gtcagccccagt	----	592	..	--gccacatggagtattttat	AGTATCACT	TGTCA	-gtgcatatgctcttgttcaa	...	76	..	ccctggttgaag	aggtcccg
							*	*	*	*	*	*	*	*

id=469592 gene=ENSG00000155511 name=GRIA1 segment=chr5_153174296_153175035_1 type=IN VIEW

Figure 97:



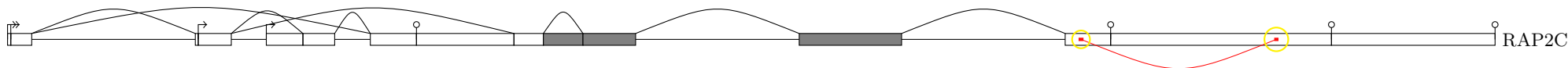
H. Sap	attca	ata	aagaacaaaaccaatagtgttttattacttt:::gttgcatctttttggagaacttaattaacgtgagattGGCAatTGAATGCAggTGCAGtTTTCTGTTaatgtcatgctgttgttag...40...ttttttccctg	agttcctg
R. Mac	attca	ata	aagaacaaaaccaatagttttttt-----:::TTAC-TTTCatCTGAAA-----cattccatgttttaactctga...168...atttttccctg	agttcctg
P. Tro	attca	ata	aagaacaaaaccaatagtgttttt-----:::TTAC-TTTCatCTGAAA-----cattccatgttttaactctga...169...ttttttccctg	agttcctg
P. Abe	attca	ata	aagaacaaaaccaatagttttttt-----:::TTAC-TTTCatCTGAAA-----cattccatgttttaactctga...168...atttttccctg	agttcctg
C. Jac	attca	ata	aagaacaaaaccaatagttttttt-----:::TTAC-TTTCatCTGAAA-----cattccatgttttaactctga...169...ttttttccctg	agttcctg
M. Mus	attca	ata	aagaacaaaaccaattgtatttt-----:::TTTTACTTTTCatCTGAAA-----cattccacattttaactctga...166...ttttttccttg	agttcctg
R. Nor	attca	ata	aagtacaaaaccaattgtattttt-----:::TTACTTTTCatCTGAAA-----cattccacattttaactctga...166...ttttttccttg	agttcctg
C. Por	attca	ata	aagaacaaaactgactgtattttt-----:::TTAC-TTTCacCTGAAA-----cattccacattttaactctga...190...atttttccctg	agttcctg
O. Cun	attca	ata	aagaacaaaaccaagtgtattttt-----:::TTAC-TTTCatCTGAAA-----cattccacattttaactctga...169...ttttttccctg	agttcctg
C. Fam	attca	ata	aagaacaaaaccaattgtattttt-----:::TTAC-TTTCatCTGAAA-----cattccacattttaactctga...169...ttttttcccta	agttcctg
F. Cat	attca	ata	aagaacaaaaccaatggatttttt-----:::TTAC-TTTCatCTGAAA-----cattccgcattttaactctga...174...ttttttcccta	agttcctg
B. Tau	attca	ata	aagaacaaaaccaattgtattttt-----:::TTAC-TTTCatCTGAAA-----cattccacattttaactctga...170...ttttttcccta	agttcctg
E. Cab	attca	ata	aagaacaaaaccaattgtattttt-----:::TTAC-TTTCatCTGAAA-----cattccacattttaactctga...170...atttttcccta	agttcctg
S. Sus	attca	ata	aagaacaaaaccagttgtattttt-----:::TTAC-TTTCatCTGAAA-----cattccgcattttaactctga...173...ttttttcccta	agttccct
O. Avi	attca	ata	aagaacaaaaccaattgtattttt-----:::TTAC-TTTCatCTGAAA-----cattccacattttaactctga...167...ttttttcccta	agttcctg
L. Afr	attca	ata	aagaacaaaaccagttgtattttt-----:::TTAC-TTTCatCTGAAA-----cattccacagtttaactctga...167...ttttttcccta	agttcctg
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			* * * ****	
				** * * * *
				***** *

id=493936 gene=ENSG0000015479 name=MATR3 segment=chr5_138665450.138665691.1 type=EN

H. Sap	tttcctg	agtt-cctgctagatttcgatttctagtagtc:::cacgcttctaattcatgtacctgcacatgtgaccttctgtgAACAGAAAATTGCATGTATaaTTTGTGTTtacttgtaactttctgtgta--...55...aacctaggcca	tggttaatt	
R. Mac	tttcctg	agtt-cctgctagatttcgatttctagtagtc:::-----TTTCA-GTAAAATGTAA---aaatattcccgttctccttg---...317...aacctaggcca	tggtcatt	
P. Tro	tttcctg	agtt-cctgctagatttcgatttctagtagtc:::-----TTTCA-GTAAAATGTAA---aaatattcccgttctccttg---...318...aacctaggcca	tggttaatt	
P. Abe	tttcctg	agtt-cctgctagatttcgatttctagtagtc:::-----TTTCA-GTAAAATGTAA---aaatattcccgttctccttg---...317...cccctaggcca	tggttaatt	
C. Jac	tttcctg	agtt-cctgctagatttcgatttctagtagtc:::-----TTTCA-GTAAAATGTAA---aaatattcccgttctccttg---...313...aaactaggcca	tggtcatt	
M. Mus	ttctctg	agtt-cctgctaggttttatatttctagtagtc:::-----TTTCA-GTAAAATGTAAAAA---tattcccgttctccttgacc...314...aaactaggcca	tggtgatt	
R. Nor	ttcctctg	agtt-cctgctaggttttctatttctagtagtc:::-----TTTCA-GTAAAATGTAA---aaatattaccgttctccttg---...314...caactaggcca	tggtgatt	
C. Por	ttcccctg	agtt-cctgctaggtttctgatttctagtagtc:::-----TTTCA-GTAAAATGTAA---aaatattcccgttctccttg---...313...aacctaggcca	tggtcatt	
O. Cun	tttcctg	agtt-cctgctagatttcgatttctagtagtt:::-----TTTCA-GTAAAATGTAA---aaatgttcccgttctcctgac---...318...aacctaggcca	tggtcatt	
C. Fam	ttcccata	agtt-cctgctagatttcgatttctagtagtc:::-----TTTCA-GTAAAATGTAA---aaatattcccgttctccttg---...316...aacctaggcca	tggtcatt	
F. Cat	ttccccta	agtt-cctgctagatttcgatttctagtagtc:::-----TTTCA-GTAAAATGTAA---aaatattcccgttcccttg---...315...aacctaggcca	agttcatt	
B. Tau	ttccccta	agtt-cctgctagatttcgatttctagaagtc:::-----TTTCA-GTAAAATGTAA---aaatattccccttctccttg---...325...aacctaggcca	tggtcatt	
E. Cab	tttccta	agtt-cctgctagatttcgatttctagtagtc:::-----TTTCA-GTAAAATGTAA---aaatattcccgttctccttc---...313...aacctaggcca	tggtcatt	
S. Sus	tttccta	agttcccctgctagatttcgatttctagtagtc:::-----TTTCA-GTAAAATGTAA---aaatactcccattctcctg---...312...aaaaataggcca	tggtcatt	
O. Avi	ttccccta	agtt-cctgctagatttcgatttctagaagtc:::-----TTTCA-GTAAAATGTAA---aaatattccccttctccttg---...324...aacctaggcca	tggtcatt	
L. Afr	tttccta	agtt-cctgctagatttcgatttctagtagtc:::-----TTTCA-GTAAAATGTAA---aaatattcccgttctccttg---...306...aacctaggcca	tggttatt	
	**	*	**** ***** ** ***** **	
				** ** * * *
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				*** **

id=493937 gene=ENSG0000015479 name=MATR3 segment=chr5_138665692.138666094.1 type=EN VIEW

Figure 98:



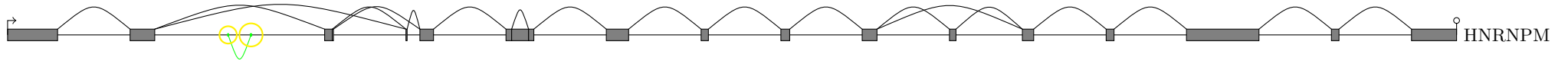
H. Sap	aattgcag	at-a-aaactcagaggaaatttgcacagatGCTGcTTTGgaGAACTTTACA	acctgggttcagaactgag...58...	gtctttggcctt	caagatcc
R. Mac	aattgcag	aa-a-aaactcagaggaaatttgcacagatGCTGcTTTGgaGAACTTTACA	acctgggttcagaactgag...58...	gtctttggcctt	caagatcc
P. Tro	aattgcag	at-a-aaactcagaggaaatttgcacagatGCTGcTTTGgaGAACTTTACA	acctgggttcagaactgag...58...	gtctttggcctt	caagatcc
P. Abe	aattgcag	at-a-aaactcagaggaaatttgcacagatGCTGcTTTGgaGAACTTTACA	acctgggttcagaactgag...58...	gtctttggcctt	caagatcc
C. Jac	aattgcag	at-a-aaactcagaggaaatttgcacagatGCTGcTTTGgaGAACTTTACA	acctgggttcagaactgag...58...	gtctttggcctt	caagatcc
M. Mus	acttgcag	attacaactcagaggaaatttgcacagatGCTGcTTTGgaGAACTTTACA	acctgggttcagaactgag...58...	gtctttggcctt	caagatcc
R. Nor	acttgcag	ataa-aaactcagaggaaatttgcacagatGCTGcTTTGgaGAACTTTACA	acctgggttcagaactgag...58...	gtctttggcctt	ccagatcc
C. Por	aattgcag	at-a-aaactcagaggaaatttgcacagatGCTGcTTTGgaGAACTTTACA	acctgggttcagaactgag...58...	gtctttggcctt	caagatcc
O. Cun	aattgcag	at-a-aaactcagaggaaatttgcacagatGCTGcTTTGgaGAACTTTACA	acctgggttcagaactgag...57...	ggctttggcctt	caagatcc
C. Fam	aattgcag	at-a-aaactcagaggaaatttgcacagatGCTGcTTTGgaGAACTTTACA	acctgggttcagaactgag...58...	gtctttggcctt	caagatcc
B. Tau	aattgcag	at-a-aaactcagaggaaatttgcacagatGCTGcTTTGgaGAACTTTACA	acctgggttcagaactgag...58...	gtctttggcctt	caagatcc
E. Cab	aattgcag	at-a-aaactcagaggaaatttgcacagatGCTGcTTTGgaGAACTTTACA	acctgggttcagaactgag...58...	gtctttggcctt	caagctcc
S. Sus	aattgcag	at-a-aaactcagaggaaatttgcacagatGCTGcTTTGgaGAACTTTACA	acctgggttcagaactgag...58...	gtctttggcctt	caagaacc
L. Afr	aattgcag	at-a-aaactcagaggaaatttgcacagatGCTGcTTTGgaGAACTTTACA	acctgggttcagaactgag...58...	gtctttggcctt	caagatcc
		* * * * *		* * * * *	* * * *

id=226029 gene=ENSG00000123728 name=RAP2C segment=chrX.131339477_131339615_-1 type=EN

H. Sap	ttggcctt	caagatccatcg...584...	ggcagtaacattttcctttcTGTGAAGTTCTAAA	AttTAGT	tatgacctatttagcaatgc----	...131...	tcatacacactt	tctagttc
R. Mac	ttggcctt	caagatccatcg...590...	ggcagtaacattttcctttcTGTGAAGTTCTAAA	AttTAGT	tatgacctatttagcaatgc----	...131...	tcatacacactt	tctagttc
P. Tro	ttggcctt	caagatccatcg...582...	ggcagtaacattttcctttcTGTGAAGTTCTAAA	AttTAGT	tatgacctatttagcaatgc----	...131...	tcatacacactt	tctagttc
P. Abe	ttggcctt	caagatccatcg...585...	ggcagtaacattttcctttcTGTGAAGTTCTAAA	AttTAGT	tatgacctatttagcaatgc----	...131...	tcatacacactt	tctagttc
C. Jac	ttggcctt	caagatccatcg...578...	tgcagtaacattttcctttcTGTGAAGTTCTAAA	AttTAGT	tatgacctatttagcaatgc----	...131...	tcatacacactt	tctagttc
M. Mus	ttggcctt	caagatccacgg...552...	agcagtaacattttcctttcTGTGAAGTTCTAAA	AttTAGT	tatgacctacttagcaatgc----	...131...	ccatgtacaatt	tctagttc
R. Nor	ttggcctt	ccagatccatgg...546...	ggcagtaacattttcctttcTGTGAAGTTCTAAA	AttTAGTCTG	acctacttagcaatgccttt...	...125...	ccatggacaatt	tctagttc
C. Por	ttggcctt	caagatccaatg...549...	ggcagtaacattttcctttcTGTGAAGTTCTAAA	AttTAGT	tatgacctacttagtaatgc----	...131...	tcatgtacactt	tctagttc
O. Cun	ttggcctt	caagatccaacg...550...	ggcagtaacattttcctttcTGTGAAGTTCTAAA	AttTAGT	tatgacctacttagcaatgc----	...130...	tcatgtacactt	tctagttc
C. Fam	ttggcctt	caagatccatcg...562...	agcagtaacattttcctttcTGTGAAGTTCTAAA	AttTAGT	tatgacctacttagcaatgc----	...131...	tcgtatacactt	tctagttc
B. Tau	ttggcctt	caagatccattg...564...	agcagtaacattttcctttcTGTGAAGTTCTAAA	AttTAGT	tatgacctacttagcaatgc----	...131...	tcatacacactt	tctagttc
E. Cab	ttggcctt	caagctccatcg...561...	agcagtaacattttcctttcTGTGAAGTTCTAAA	AttTAGT	tatgacctacttagcaatgc----	...131...	tcatacacactt	tctagttc
S. Sus	ttggcctt	caagaaccattg...566...	agcagtaacattttcctttcTGTGAAGTTCTAAA	AttTAGT	tatgacctacttagcaatgc----	...132...	tcatacacactt	tctagttc
L. Afr	ttggcctt	caagatccatcg...563...	agcagtaacattttcctttcTGTGAAGTTCTAAA	AttTAGTTATG	acctacttagcaatgccttt...	...126...	tcatacacactt	tctagttc
		*****	* * * * *		*****		* * * * *	* * * *

id=226030 gene=ENSG00000123728 name=RAP2C segment=chrX.131338678_131339476_-1 type=E3 VIEW

Figure 99:



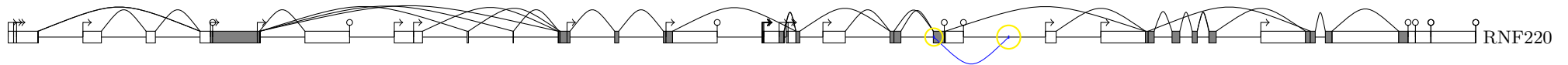
H. Sap	agaaaaag	gtaatggtactg...	.4741...	-----t	ggaatagctt	gtttgtggt	GGGAg	GAAAAATCAAGGACA	---	tattgttaac	gtgttttcac	---	...165...	actgattt	gtag	ttggtgag		
R. Mac	agaaaaag	gtaatggtactg...	.4741...	-----t	ggaatagctt	gtttgtggt	GGGAg	GAAAAATCAAGGACA	---	tattgttaac	gtgttttcac	---	...165...	actgattt	gtag	ttggtgag		
P. Tro	agaaaaag	gtaatggtactg...	.4741...	-----t	ggaatagctt	gtttgtggt	GGGAg	GAAAAATCAAGGACA	---	tattgttaac	gtgttttcac	---	...165...	actgattt	gtag	ttggtgag		
P. Abe	agaaaaag	gtaatggtactg...	.4741...	-----t	ggaatagctt	gtttgtggt	GGGAg	GAAAAATCAAGGACA	---	tattgttaac	gtgttttcac	---	...165...	actgattt	gtag	ttggtgag		
C. Jac	agaaaaag	gtaatggtactg...	.4741...	-----t	ggaatagctt	gtttgtggt	GGGAg	GAAAAATCAAGGACA	---	tattgttaac	gtgttttcac	---	...165...	actgattt	gtag	ttggtgag		
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P. Abe	agaaaaag	gtaatggtactg...	.4902...	--tgattgtt	ctaattcccat	TGTTTt	CTTGGc	TTTTCTCCC	ttggtttat	gtgtcgtc	tggaaact	gattt	gtag	ttggtgag
C. Jac	agaaaaag	gtaatggtactg...	.4902...	--tgattgtt	ctaattcccat	TGTTTt	CTTGGc	TTTTCTCCC	ttggtttat	gtgtcgtc	tggaaact	gattt	gtag	ttggtgag
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Figure 100:



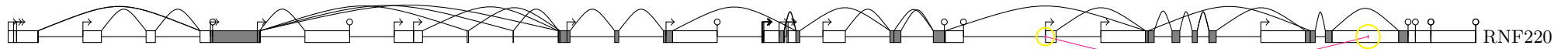
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P.Tro	tggggaaa	tggaattgtgag...1470...gggaacaggggccggaggtg	CCTTTaTCTGcaGAGA	attgctccagctttcctgat...379...agttaaatggc	ggtgacct
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Figure 101: CS=8.4



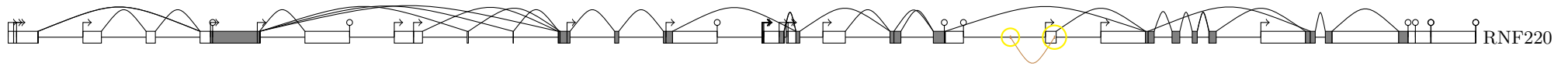
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C. Jac	tggggaaa	tggaattgtgag...1857...	cgtgcttaatgtgattgaaa	GGCAGTTAAaa	TGGC	ggtgacct
M. Mus	tggggaaa	tggaattgtgag...1810...	cctgcttaatgtgattgaaa	GGCAGTTAAaa	TGGC	ggtgacct
R. Nor	gtgggaaa	tggaattgtgag...1804...	cctgcttaatgtgattgaaa	GGCAGTTAAaa	TGGC	ggtgacct
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B. Tau	tggggaaa	tggaattgtgag...1833...	cgtgcttaatgtgattgaaa	GGCAGTTAAaa	TGGC	ggtgacct
E. Cab	tggggaaa	tggaattgtgag...1902...	cgtgcttaatgtgattgaaa	GGCAGTTAAaa	TGGC	ggtgacct
S. Sus	tggggaga	tggaattgtgag...1865...	cgtgcttaatgtgattgaaa	GGCAGTTAAaa	TGGC	ggtgacct
L. Afr	tggagaaa	tggaattgtgag...1908...	cgtgcttaatgtgattgaaa	GGCAGTTAAaa	TGGC	ggtgacct
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Figure 102: CS=3.9



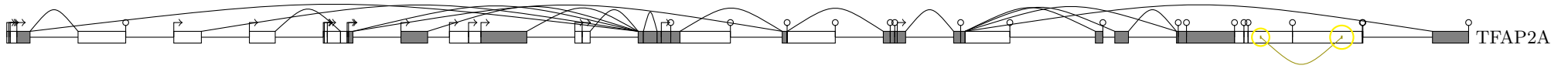
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Figure 103:



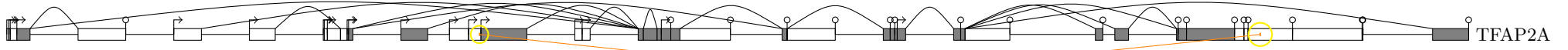
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M. Mus	tgaataaa	cttgaacacaaa...81...--acacaatccacaattctata	AGGGAAt	CAGTGTT	CA	cgctctctgtatatatttatt...312...ggaaaaaaatca	g-tg	atatt
C. Por	tgaataaa	cttgaacacaaa...81...--acacgattcacagtcata	AGGGAAt	CAGTGTT	CA	cgctctctgtatatatttatt...302...tgaagcaaaaa	g-tg	acatt
O. Cun	tgaataaa	cttgaacacaaa...77...caacacgatt--cagttctata	AGGGAAt	CAGTGTT	CA	cgctctctgtatatatttatt...315...tgaagtaaaaa	g-tg	atgct
C. Fam	tgaataaa	cttgaacacaaa...83...--acacgattcacagttatata	AGGGAAt	CAGTGTT	CA	cgctctctgtatatatttatt...319...tgaagaaaaaaa	g-tg	atcct
B. Tau	tgaataaa	cttgaacacaca...83...caacacgattcacaaattcta	TAAGGGAAt	CAGTGTT	CA	cgctctctgtatatatttatt...310...ggaaaaaaatca	g-tg	atatt
E. Cab	tgaataaa	cttgaacacaaa...83...--acacgattcacagttatata	AGGGAAt	CAGTGTT	CA	cgctctctgtatatatttatt...304...tgaagcaaaaa	g-tg	atatt
S. Sus	tgaataaa	cttgaacgcaga...83...--acacgattcacagttatata	AGGGAAt	CAGTGTT	CA	cgctctctgtatatatttatt...308...ctgaagaaaaa	g-tc	ctatg
L. Afr	tgaataaa	cttgaacacaaa...84...--acacgattcacagttctata	AGGGAAt	CAGTGTT	CA	tgctctctgtatatatttatt...304...gaagaaaaaaa	g-tg	atatt
*****	*****	** *	*** **	** *	*****	*****	* * *	*

id=561203 gene=ENSG00000137203 name=TFAP2A segment=chr6.10397643.10398104_-1 type=AN

H. Sap	-gaaaaaaa	gtgatattggac...465...tgctccttgcaataagcagc	TGAACcc	ATTGt	TCCCT	caagtataataaaaacttac--...180...ttattttat	tgttgatc
R. Mac	-gaaaaaaa	gtgatattggac...479...tgctccttgcaataagcagc	TGAACcc	ATTGt	TCCCT	caagtataataaaaacttac--...176...ttattttat	tgttgatc
P. Tro	-gaaaaaaa	gtgatattggac...467...tgctccttgcaataagcagc	TGAACcc	ATTGt	TCCCT	caagtataataaaaacttac--...180...ttattttat	tgttgatc
P. Abe	-gaaaaaaa	gtgatattggac...461...tgctccttgcaataagcagc	TGAACcc	ATTGt	TCCCT	caagtataataaaaacttac--...176...ttattttat	tgttgatc
C. Jac	-gaaaaaaa	ctgacattggga...469...tgctccttgcaataagcagc	TGAACcc	ATTGt	TCCCT	caagtataataaaaacttac--...180...ttattttat	tgttgatc
M. Mus	-aaaaatca	gtgatattggga...562...tgctccttgcaataagcagc	TGAACcc	ATTGt	TCCCT	caagtataataaaaacttac--...180...ttattttat	tgttgatc
C. Por	-agcaaaaa	gtgacattggga...459...tgctccttgcaataagcagc	TGAACt	CATTGt	TCCCT	caagtataataaaaacttac--...178...ttattttat	tgttgatc
O. Cun	-agtataaaa	gtgatattggac...484...tgctccttgcaataagcagc	TGAACcc	ATTGt	TCCCT	caagtataataaaaacttac--...180...taattttat	tgttgatc
C. Fam	-agaaaaaa	gtgatattggac...473...tgctccttgcaataagcagc	TGAACcc	ATTGt	TCCCT	caagtataataaaaacttac--...180...ttattttat	tgttgatc
B. Tau	-aaaaaaaa	gtgatattggac...454...tgctccttgcaataagcagc	TGAACcc	ATTGt	TCCCTTA	agtataataaaaacttactt...177...tatattttat	tgttgacc
E. Cab	-agaaacaaa	gtgatattggac...465...tgctccttgcaataagcagc	TGAACcc	ATTGt	TCCCT	caagtataataaaaacttac--...180...ttattttat	tgttgatc
S. Sus	-aagaaaaa	gtcctatggac...487...tgctccttgcaataagcagc	TGAACcc	ATTGt	TCCCT	caagtataataaaaacttac--...172...agtattttat	tgttgggc
L. Afr	-gaaaaaaa	gtgatattggac...463...tgctccttgcaataagcagc	TGAACcc	ATTGt	TCCCT	caagtataataaaaacttac--...180...ttattttat	tgttgatc
	* *	* *	*****	*****	*****	*****	*** **

id=561204 gene=ENSG00000137203 name=TFAP2A segment=chr6.10396916.10397642_-1 type=AN VIEW

Figure 104:



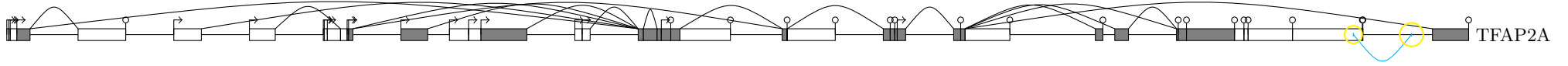
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R. Mac	ctccctct	ccccca-ctccgat...65...-cgcttcacgctcgatttcca	GGCATT	TTCCTTAT	taagtattcgtgtaat	attaatag
P. Tro	ctccctct	ccccca-ctccgat...65...-cgcttcacgctcgatttcca	GGCATT	TTCCTTAT	taagtattcgtgtaat	attaatag
P. Abe	ctccctct	ccccca-ctctgat...65...-cgcttcacgctcgatttcca	GGCATT	TTCCTTAT	taagtattcgtgtaat	attaatag
C. Jac	ctccctct	ccccca-ctccgat...65...-cgcttcacgctcgatttcca	GGCATT	TTCCTTAT	taagtattcgtgtaat	attaatag
M. Mus	ctccctct	ccccacctccga...65...-cgcttcacgctcgatttcca	GGCATT	TTCCTTAT	taagtattcgtgtaat	attaatag
C. Por	ctccccgt	ccccacctccga...65...-cgcttcacgctcgatttcca	AGGCATT	TTCCTTAT	taagtattcgtgtaat	attaatag
O. Cun	ctccctct	ccccacctccga...66...-cgcttcacgctcgatttcca	GGCATT	TTCCTTAT	taagtattcgtgtaat	attaatag
C. Fam	ctccctct	ccccacctccga...66...-cgcttcacgctcgatttcca	GGCATT	TTCCTTAT	taagtattcgtgtaat	attaatag
B. Tau	ctgcctct	ccccacctccga...66...-cgcttcacgctcgatttcca	GGCATT	TTCCTTAT	taagtattcgtgtaat	attaatag
E. Cab	ctccctct	ccccacctccga...66...-cgcttcacgctcgatttcca	GGCATT	TTCCTTAT	taagtattcgtgtaat	attaatag
S. Sus	ctccctct	ccccacctccga...66...-cgcttcacgctcgatttcca	GGCATT	TTCCTTAT	taagtattcgtgtaat	attaatag
L. Afr	cgccctcg	ccccacctccga...65...-cgcttcacgctcgatttcca	GGCATT	TTCCTTAT	taagtattcgtgcat	attaatag
	* **	***** ** *	*****	*****	*****	*****

id=561168 gene=ENSG00000137203 name=TFAP2A segment=chr6.10412280.10412408.-1 type=AN

H. Sap	tgaataaa	cttgaacacaaa...80...--gcaacacgattcgcagttat	ATAAGGGAA	tcAGTGTT	-cacgtctctgtatatattta...301...gaaagaaaaaa	g-tg	atatt
R. Mac	tgaataaa	cttgaacacaaa...80...--gcaacacgattcgcagttat	ATAAGGGAA	tcAGTGTT	-cacgtctctgtatatattta...300...gaaagaaaaaa	g-tg	atatt
P. Tro	tgaataaa	cttgaacacaaa...80...--gcaacacgattcgcagttat	ATAAGGGAA	tcAGTGTT	-cacgtctctgtatatattta...301...gaaagaaaaaa	g-tg	atatt
P. Abe	tgaataaa	cttgaacacaaa...80...--gcaacacgattcgcagttat	ATAAGGGAA	tcAGTGTT	-cacgtctctgtatatattta...305...gaaagaaaaaa	g-tg	atatt
C. Jac	tgaataaa	cttgaacacaaa...80...--gcaacacgattcgcagttat	ATAAGGGAA	tcAGTGTT	-cacgtctctgtatatattta...306...gaaagaaaaaa	actg	acat-
M. Mus	tgaataaa	cttgaacacaaa...78...--atgacacaatccacaattct	ATAAGGGAA	tcAGTGTT	-cacgtctctgtatatattta...314...ggaaaaaaatca	g-tg	atatt
C. Por	tgaataaa	cttgaacacaaa...74...tggcaacacgatt--cagttct	ATAAGGGAA	tcAGTGTT	-cacgactctgtatatattta...317...tgaagtaaaaa	g-tg	atgct
C. Fam	tgaataaa	cttgaacacaaa...80...--gcaacacgattcgcagttat	ATAAGGGAA	tcAGTGTT	-cacgtctctgtatatattta...321...tgaagaaaaaa	g-tg	atctt
B. Tau	tgaataaa	cttgaacacaca...82...--gcaacacgattcacaattct	ATAAGGGAA	tcAGTGTT	-cacgtctctgtatatattta...312...ggaaaaaa	g-tg	atatt
E. Cab	tgaataaa	cttgaacacaaa...80...--gcaacacgattcgcagttat	ATAAGGGAA	tcAGTGTT	-cacgtctctgtatatattta...306...tgaagacaaa	g-tg	atatt
S. Sus	tgaataaa	cttgaacgcaga...80...--gcaacacgattcgcagttat	ATAAGGGAA	tcAGTGTT	-cacgtctctgtatatattta...310...ctgaagaaaa	g-tc	ctatg
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	*****	***** ** *	**** *	** *	*****	*****	* * *

id=561203 gene=ENSG00000137203 name=TFAP2A segment=chr6.10397643.10398104.-1 type=AN VIEW

Figure 105:



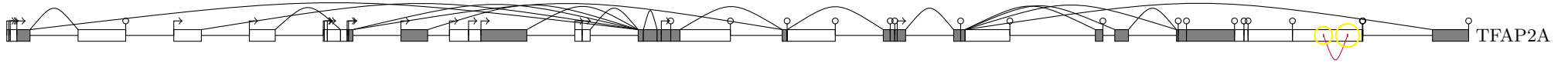
H.Sap	-gaaaaaaaa	gtgatattggac...587...tgacacaaat-aaaacccaatg	TATTC	TTTGGATA	aaagattgtttgtactgcta-----	..62...ttattttatta	tgttgatc
R.Mac	-gaaaaaaaa	gtgatattggac...601...tgacacaaat-aaaacccaatg	TATTC	TTTGGATA	aaagattgt---actgctaaagg-----	..58...ttattttatta	tgttgatc
P.Tro	-gaaaaaaaa	gtgatattggac...589...tgacacaaat-aaaacccaatg	TATTC	TTTGGATA	aaagattgtttgtactgcta-----	..62...ttattttatta	tgttgatc
P.Abe	-gaaaaaaaa	gtgatattggac...583...tgacacaaat-aaagcccaatg	TATTC	TTTGGATA	aaagattgt---actgctaaaag-----	..58...ttattttatta	tgttgatc
C.Jac	gaaaaaaaa	ctgacattgga...591...tgacacaaat-aaaacccaatg	TATTC	TTTGGATA	aaagattgtttgtactgcta-----	..62...ttattttatta	tgttgatc
M.Mus	-aaaaatca	gtgatattggga...684...cgacccaat-aaagcccgatg	TATTC	TTTGGATA	aaagattgtttgtactgcta-----	..62...ttattttatta	tgttgatc
C.Por	-agcaaaaa	gtgacattggga...581...tgacacaaat-aaaacccaatg	TATTC	TTTGGATA	agATTG--ttgtactgctaacggaatg...54...ttattttatta	tgttgatc	
O.Cun	-agtaaaaa	gtgatgctggac...606...tgacacaaat-aaaacccaatg	TATTC	TTTGGATA	aaagattgtttgtactgcta-----	..62...taattttatta	tgttgatc
C.Fam	-agaaaaaa	gtgatcttggac...595...tgacacaaat-aaaacccaatg	TATTC	TTTGGATA	aaagattgtttgtactgcta-----	..62...ttattttatta	tgttgatc
B.Tau	-aaaaaaaa	gtgatattggac...576...tgacacaaat-aaaacccaatg	TATTC	TTTGGATA	aaagattgtgtgtactgctc-----	..61...tatattttatta	tgttgacc
E.Cab	-agaacaaa	gtgatattggac...587...tgacacaaat-aaaacccaatg	TATTC	TTTGGATA	aaagattgtttgtactgcta-----	..62...ttattttatta	tgttgatc
S.Sus	-aagaaaaa	gtcctatggaac...610...-gacacaataaaaaccagt	TATTC	TTTGGATA	aaagattgt---actgctaaagg-----	..53...aagttttatta	tgttgaggc
L.Afr	-gaaaaaaaa	gtgatattggac...585...tgacacaaat-aaaacccaatg	TATTC	TTTGGATA	aaagattgtgtactgcta-----	..62...ttattttatta	tgttgatc
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id=561204 gene=ENSG00000137203 name=TFAP2A segment=chr6_10396916_10397642-1 type=AN

H.Sap	ta	tgttga	tcctttaggttt...2851...-----tcactaatgcttgcctaacg	TGTCCAAAAGAATA	atcaagtttagaggacggcgt...187...tctacattacag	gtgcagag
R.Mac	ta	tgttga	tcctttaggtta...2860...-----tcactaatgcttgcctaacg	TGTCCAAAAGAATA	atcaagtttagaggacggcat...187...tctgcgttacag	gtgcagag
P.Tro	ta	tgttga	tcctttaggttt...2848...-----tcactaacgcttgcctaacg	TGTCCAAAAGAATA	atcaagtttagaggacggcat...187...tctacattacag	gtgcagag
P.Abe	ta	tgttga	tcctttaggttt...2863...-----tcactaatgcttgcctaacg	TGTCCAAAAGAATA	atcaagtttagaggacggcat...187...tctacattacag	gtgcagag
C.Jac	ta	tgttga	tcctttaggttt...2994...-----tcactaatgcttgcctaacg	TGTCCAAAAGAATA	atcaagtttagaggacggcat...187...tctgtgttacag	gtgcagag
M.Mus	ta	tgttga	tcctttaggttt...2825...-----tcactaatgcttgcctaacg	TGTCCAAAAGAATA	atcaagttagaagaggcgt...196...tcogagttacag	gtgcaaa
C.Por	ta	tgttga	tcctttaggttt...2743...atcaatcactaatgcttgc	TAATgTGTCCAAAAGAATA	atcaagtttagaggacggcac...188...tgtgaattacag	gtgcacag
O.Cun	ta	tgttgt	tcctttaggttt...2777...-----tcactaatgcttgcctaacg	TGTCCAAAAGAATA	atcaagtttagaggacggcat...172...tctgagttacag	gtgcagaa
C.Fam	ta	tgttga	tcctttaggttt...2871...-----tcactaatgcttgcctaacg	TGTCCAAAAGAATA	atcaagtttagaggacggcat...202...ttgagttacag	gtgcagag
B.Tau	ta	tgttga	ccctttaggttt...2814...-----tcactaatgcttgcctaacg	TGTCCAAAAGAATA	atcaagtttagaggacggcat...185...tctgagttacag	gtgcagag
E.Cab	ta	tgttga	tcctttaggttt...2829...-----tcactaatgcttgcctaacg	TGTCCAAAAGAATA	atcaagtttagaggacggcat...207...ttgagttacag	gtgcagag
S.Sus	ta	tgttgg	gccttttaggtt...2828...-----tcactaatgcttgcctaacg	TGTCCAAAAGAATA	atcaagtttagaggacggcat...185...tctgggttacag	gtgcagag
L.Afr	ta	tgttga	tcctttaggttt...2782...-----tcactaatgcttgcctaacg	TGTCCAAAAGAATA	atcaagtttagaggacggcat...182...cctgagttacag	gtgcagga
	**	*****	** * * * *		*****	*****

id=561206 gene=ENSG00000137203 name=TFAP2A segment=chr6_10393795_10396909-1 type=IN VIEW

Figure 106:



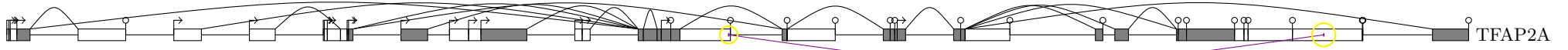
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R. Mac	-gaaaaaaa	gtgatattggac...291...ctggcagtagtttccatgcc	GTCAATGTATC	atagtcctttgttgcccaga...370...ttatatttatta	tgttgatc
P. Tro	-gaaaaaaa	gtgatattggac...279...ctggcagtagtttccatgcc	GTCAATGTATC	atagtcctttgttgcccaga...374...ttatatttatta	tgttgatc
P. Abe	-gaaaaaaa	gtgatattggac...273...ctggcagtagtttccatgcc	GTCAATGTATC	atagtcctttgttgcccaga...370...ttatatttatta	tgttgatc
C. Jac	gaaaaaaa	ctgacattgga-...281...ctggcagtagtctccatgcc	GTCAATGTATC	atagtcctttgttgcccaga...374...ttatatttatta	tgttgatc
M. Mus	-aaaaatca	gtgatattggga...372...ctggcaggagcctctatgcc	GTCAATGTATC	atagtcctttgttgcccaga...376...ttatatttatta	tgttgatc
C. Por	-agcaaaaa	gtgacattggga...272...ccggcactagttttccatgcc	GTCAATGTATC	atagtcctttgttgcccaga...371...ttatatttatta	tgttgatc
O. Cun	-agtaaaaa	gtgatgctggac...296...ctggcagtagtttccatgcc	GTCAATGTATC	atagtcctttgttgcccaga...374...taattttatta	tgttgatc
C. Fam	-agaaaaaa	gtgatcttggac...285...ctggcagtagtttccatgcc	GTCAATGTATC	atagtcctttgttgcccaga...374...ttatatttatta	tgttgatc
B. Tau	-aaaaaaaa	gtgatattggac...267...ctggcagtagtttccatgcc	GTCAATGTATC	atagtcctttgttgcccaga...372...tatatttatta	tgttgacc
E. Cab	-agaacaaa	gtgatattggac...277...ctggcagtagtttccatgcc	GTCAATGTATC	atagtcctttgttgcccaga...374...ttatatttatta	tgttgatc
S. Sus	-aagaaaaa	gtcctatggaac...299...ctggcagtagtttccatgcc	GTCAATGTATC	atagtcctttgttgcccaga...366...aagttttatta	tgttgggc
L. Afr	-gaaaaaaa	gtgatattggac...275...ctggcagtagtttccatgcc	GTCAATGTATC	atagtcctttgttgcccaga...374...ttatatttatta	tgttgatc
	* * *	* * * * *	*****	*****	*** **

id=561204 gene=ENSG00000137203 name=TFAP2A segment=chr6_10396916_10397642_-1 type=AN

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R. Mac	-gaaaaaaa	gtgatattggac...540...caacttggagttcagagcag	GGTAtCATTtaGATA	ttccactgagtcgtattca...118...ttatatttatta	tgttgatc
P. Tro	-gaaaaaaa	gtgatattggac...528...caacttggagttcagagcag	GGTAtCATTtaGATA	ttccactgtgtctgtattca...122...ttatatttatta	tgttgatc
P. Abe	-gaaaaaaa	gtgatattggac...522...caacttggagttcagagcag	GGTAtCATTtaGATA	ttccactgagtcgtattca...118...ttatatttatta	tgttgatc
C. Jac	gaaaaaaa	ctgacattgga-...530...caacttggagttcagagcag	GGTAtCATTtaGATA	ttccactgagtcgtattca...122...ttatatttatta	tgttgatc
M. Mus	-aaaaatca	gtgatattggga...623...caacttggagttcagagcag	GGTAtCATTtaGATA	ttccactgagtcgtattca...122...ttatatttatta	tgttgatc
C. Por	-agcaaaaa	gtgacattggga...520...caacttggagttcagagcag	GGTAtCATTtaGATA	ttccaccgagtcgtattca...120...ttatatttatta	tgttgatc
O. Cun	-agtaaaaa	gtgatgctggac...545...caacttggagttcagagcag	GGTAtCATTtaGATA	ttccactgagtcgtattca...122...taattttatta	tgttgatc
C. Fam	-agaaaaaa	gtgatcttggac...534...caacttggagttcagagcag	GGTAtCATTtaGATA	ttccactgagtcgtattca...122...ttatatttatta	tgttgatc
B. Tau	-aaaaaaaa	gtgatattggac...515...caacttggagttcagagcag	GGTAtCATTtaGATA	ttccattgagtcgtattca...121...tatatttatta	tgttgacc
E. Cab	-agaacaaa	gtgatattggac...526...caacttggagttcagagcag	GGTAtCATTtaGATA	ttccactgagtcgtattca...122...ttatatttatta	tgttgatc
S. Sus	-aagaaaaa	gtcctatggaac...548...caacttggagttcagagcag	GGTAtCATTtaGATA	ttccattgagtcgtattca...114...aagttttatta	tgttgggc
L. Afr	-gaaaaaaa	gtgatattggac...524...caacttggagttcagagcag	GGTAtCATTtaGATA	ttccaccgagtcgtattca...122...ttatatttatta	tgttgatc
	* * *	* * * * *	*****	*****	*** **

id=561204 gene=ENSG00000137203 name=TFAP2A segment=chr6_10396916_10397642_-1 type=AN VIEW

Figure 107:



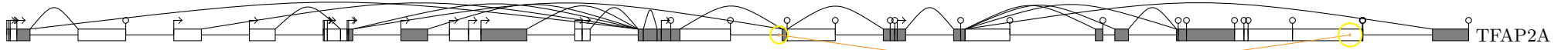
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R.Mac	agggtcccg	gtaagaggccgc...744...actatttaca	---	atgcaaacca	GGCTA	TGATA	Aat	TTGA	aaatactttctggaatt	aaaccagt
P.Tro	agggtcccg	gtaagaggccgc...749...actatttaca	---	atgcaaacca	GGCTA	TGATA	Aat	TTGA	aaatactttctggaatt	aaacttaa
P.Abe	agggtcccg	gtaagaggccgc...749...actatttaca	---	atgcaaacca	GGCTA	TGATA	Aat	TTGA	aaatactttctggaatt	aaacttaa
C.Jac	agggtcccg	gtaagaggccgc...751...actatttaca	---	ttgcaaacca	GGCTA	TGATA	Aat	TTGA	aaatactttctgaaatt	aaacttca
M.Mus	acgtcccg	gtaagaggcgg...721...actacttaga	---	atgtaaccca	GGCTA	Aag	GATA	Aat	TTGA	aaatactttttaaatt
C.Por	acgtcccg	gtaagaggccgc...774...actatttaca	---	acgcaaacca	GGCTA	TGATA	Aat	TTGA	aaatactttctgaaatt	aaatttaa
O.Cun	acgtcccg	gtaagaggcccc...788...---	---	tgttcagtgtgtgcaagcca	GGCTA	TGATA	Aat	TTGA	aaatactttctgaaatt	aagttaa
C.Fam	acgtcccg	gtaagaggccgc...820...actatttaca	---	atgtaaacca	GGCTA	TGATA	Aat	TTGA	aaatactttctgaaatt	aaatttaa
B.Tau	acgtcccg	gtaagaggccgc...790...ctctttggca	---	atgcaaacca	GGCTA	TGATA	Aat	TTGA	aaatactttctgaaatt	aaatttaa
E.Cab	acgtcccg	gtaagaggcctc...777...actgtttaca	---	atgcaaacca	GGCTA	TGATA	Aat	TTGA	aaatactttccaaaatt	aaatttaa
S.Sus	acgtcccg	gtaagaggccgc...802...actatttaca	---	atgcaagcca	GGCTA	TGATA	Aat	TTGA	aaatactttctgaaatt	aaatttaa
L.Afr	acgtcccg	gtaagaggccgc...746...acaatttaca	---	atgcaaacca	GGCTA	TGATA	Aat	TTGA	aaatactttctgaaatt	aaatttga
	* * *	*****		*		* * *	*****	*****	*****	**

id=561179 gene=ENSG00000137203 name=TFAP2A segment=chr6.10409319.10410133.-1 type=AN

H.Sap	-gaaaaaaaa	gtgatattggac...279...ggcagtagtttccatgcctg	TCAA	tg	TATCATAGTC	c	ttt	gtt	gcc	agataaata...368...ttattttattta	tg	ttg	atc	
R.Mac	-gaaaaaaaa	gtgatattggac...293...ggcagtagtttccatgcctg	TCAA	tg	TATCATAGTC	c	ttt	gtt	gcc	agataaata...364...ttattttattta	tg	ttg	atc	
P.Tro	-gaaaaaaaa	gtgatattggac...281...ggcagtagtttccatgcctg	TCAA	tg	TATCATAGTC	c	ttt	gtt	gcc	agataaata...368...ttattttattta	tg	ttg	atc	
P.Abe	-gaaaaaaaa	gtgatattggac...275...ggcagtagtttccatgcctg	TCAA	tg	TATCATAGTC	c	ttt	gtt	gcc	agataaata...364...ttattttattta	tg	ttg	atc	
C.Jac	gaaaaaaaa	ctgacattgga...283...ggcagtagtctccatgcctg	TCAA	tg	TATCATAGTC	c	ttt	gtt	gcc	agataaata...368...ttattttattta	tg	ttg	atc	
M.Mus	-aaaaatca	gtgatattggga...374...ggcaggagcctcctatgcctg	TCAA	tg	TATCa	TAGTC	c	ttt	gtt	gcc	agataaata...370...ttattttattta	tg	ttg	atc
C.Por	-agcaaaaa	gtgacattggga...274...ggcactagtttccatgcctg	TCAA	tg	TATCATAGTC	c	ttt	gtt	gcc	agataaata...365...ttattttattta	tg	ttg	atc	
O.Cun	-agtaaaaa	gtgatattggac...298...ggcagtagtttccatgcctg	TCAA	tg	TATCATAGTC	c	ttt	gtt	gcc	agataaata...368...taattttattta	tg	ttg	ttc	
C.Fam	-agaaaaaa	gtgatattggac...287...ggcagtagtttccatgcctg	TCAA	tg	TATCATAGTC	c	ttt	gtt	acc	agataaata...368...ttattttattta	tg	ttg	atc	
B.Tau	-aaaaaaaa	gtgatattggac...269...ggcagtagtttccatgcctg	TCAA	tg	TATCATAGTC	c	ttt	gtt	gcc	agataaata...366...tatattttattta	tg	ttg	acc	
E.Cab	-agaacaaa	gtgatattggac...279...ggcagtagtttccatgcctg	TCAA	tg	TATCATAGTC	c	ttt	gtt	gcc	agataaata...368...ttattttattta	tg	ttg	atc	
S.Sus	-aagaaaaa	gtcctatggac...301...ggcagtagtttccatgcctg	TCAA	tg	TATCATAGTC	c	ttt	gtt	gcc	agataaata...360...aagttttattta	tg	ttg	ggc	
L.Afr	-gaaaaaaaa	gtgatattggac...277...ggcagtagtttccatgcctg	TCAA	tg	TATCATAGTC	c	ttt	gtt	gcc	agataaata...368...ttattttattta	tg	ttg	atc	
	* *	* *	****	**	*	*****	*****	*****	*****	***	***	*****	*	

id=561204 gene=ENSG00000137203 name=TFAP2A segment=chr6.10396916.10397642.-1 type=AN VIEW

Figure 108: CS=6.24



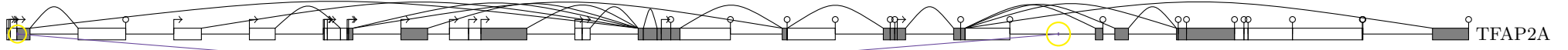
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R. Mac	ctggaatt	aaaccagtacct...	2142...	ggaggg	aatattcatttcct	TTTGt	TTTGAtt	ATACACTT	atccatgtgtatccttttggtgcag	cacgtaga	
P. Tro	ctggaatt	aaacttaacca...	2155...	gcaggg	aatattcatttcct	TTTGt	TTTGAtt	ATACAct	TACA	ccatgtgtatccttttggtgcag	catgtaga
P. Abe	ctggaatt	aaacttaacca...	2172...	gcaggg	aatattcatttcct	TTTGt	TTTGAtt	ATACACTT	acccatgtgtatccttttggtgcag	catgtaga	
C. Jac	ctggaatt	aaacttaacca...	2146...	gcaggg	aatattcatttcct	TTTGt	TTTGAtt	ATACACTT	atccatgtgtatccttttggtgcag	catgtaga	
M. Mus	ttaaatt	aaattgcaacca...	2295...	gcagcg	aatattcatttcct	TTTGt	TTTGAtt	ATACGCTT	atccatgtgtatccttttggtgcag	cacgtaga	
C. Por	ctggaatt	aaatttaacca...	2148...	acacaga	aatattcatttcct	TTTGt	TTTGAtt	ATACACTT	acatccatgtgtatccttttggtgcag	cacgtaga	
O. Cun	ctggaatt	aagtttaacca...	2232...	gcaggg	aatattcatttcct	TTTGt	TTTGAtt	ATACACTT	atccatgtgtatccttttggtgcag	cacgtaga	
C. Fam	ctggaatt	aaatttaacca...	2232...	gcaggg	aatattcatttcct	TTTGt	TTTGAtt	ATACACTT	atccatgtgtatccttttggtgcag	cacgtaga	
B. Tau	ctggaatt	aaatttaaccg...	2175...	gcgcg	aatattcatttcct	TTTGt	TTTGAtt	ATACACTT	atccatgtgtatccttttggtgcag	catgtaga	
E. Cab	caaaaatt	aaatttaacca...	2209...	gcaggg	aatattcatttcct	TTTGt	TTTGAtt	ATACACTT	atccatgtgtatccttttggtgcag	catgtaga	
S. Sus	ctggaatt	aaatttaacca...	2207...	gcaggg	aatattcatttcct	TTTGt	TTTGAtt	ATACACTT	atccatgtgtatccttttggtgcag	catgtaga	
L. Afr	ctggaatt	aaatttgaacca...	2175...	gcaagg	aatattcatttcct	TTTGt	TTTGAtt	ATACACTT	atccatgtgtatccttttggtgcag	catgtaga	
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id=561180 gene=ENSG00000137203 name=TFAP2A segment=chr6.10407078.10409318.-1 type=IN

H. Sap	-gaaaaaaa	gtgatattggac...	547...	gtatcatttagatattccac	TGTGtc	TGTATT	CAGACAAA	tgacacaataaaacccaatg...	96...	ttattttattta	tgttgatc
R. Mac	-gaaaaaaa	gtgatattggac...	561...	gtatcatttagatattccac	TGAGtc	TGTATT	CAGACAAA	tgacacaataaaacccaatg...	92...	ttattttattta	tgttgatc
P. Tro	-gaaaaaaa	gtgatattggac...	549...	gtatcatttagatattccac	TGTGtc	TGTATT	CAGACAAA	tgacacaataaaacccaatg...	96...	ttattttattta	tgttgatc
P. Abe	-gaaaaaaa	gtgatattggac...	543...	gtatcatttagatattccac	TGAGtc	TGTATT	CAGACAAA	tgacacaataaaacccaatg...	92...	ttattttattta	tgttgatc
C. Jac	gaaaaaaa	ctgacattgga-	551...	gtatcatttagatattccac	TGAGtc	TGTATT	CAGACAAA	tgacacaataaaacccaatg...	96...	ttattttattta	tgttgatc
M. Mus	-aaaaatca	gtgatattggga...	644...	gtatcatttagatattccac	TGAGtc	TGTATT	CAGACAAA	cgacccaataaaacccaatg...	96...	ttattttattta	tgttgatc
C. Por	-agcaaaaa	gtgacattggga...	542...	-tatcatttagatattccac	GAGTct	GTATT	CAGACAAA	tgacacaataaaacccaatg...	94...	ttattttattta	tgttgatc
O. Cun	-agtaaaaa	gtgatattggac...	566...	gtatcatttagatattccac	TGAGtc	TGTATT	CAGACAAA	tgacacaataaaacccaatg...	96...	taattttattta	tgttgatc
C. Fam	-agaaaaaa	gtgatattggac...	555...	gtatcatttagatattccac	TGAGtc	TGTATT	CAGACAAA	tgacacaataaaacccaatg...	96...	ttattttattta	tgttgatc
B. Tau	-aaaaaaa	gtgatattggac...	536...	gtatcatttagatattccac	TGAGtc	TGTATT	CAGACAAA	tgacacaataaaacccaatg...	95...	ttattttattta	tgttgatc
E. Cab	-agaacaaa	gtgatattggac...	547...	gtatcatttagatattccac	TGAGtc	TGTATT	CAGACAAA	tgacacaataaaacccaatg...	96...	ttattttattta	tgttgatc
S. Sus	-aagaaaaa	gtcctatggac...	569...	gtatcatttagatattccac	TGAGtc	TGTATT	CAGACAAA	tgacacaataaaacccaatg...	88...	aagttttattta	tgttgatc
L. Afr	-gaaaaaaa	gtgatattggac...	546...	-tatcatttagatattccac	GAGTct	GTATT	CAGACAAA	tgacacaataaaacccaatg...	96...	ttattttattta	tgttgatc
	*	*	*	*	*****	*	*****	***	*****	**	*

id=561204 gene=ENSG00000137203 name=TFAP2A segment=chr6.10396916.10397642.-1 type=AN VIEW

Figure 109: CS=3.9



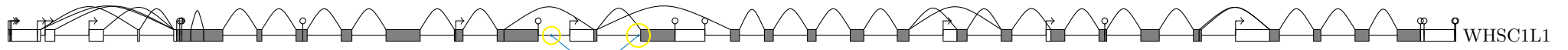
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R.Mac	gtgaattc	c-tgggccagcgc...27...tctttatgaccaggtgagat	GTTGGtgAGC	AggTAAAA
P.Tro	gtgaattc	c-tgggccagcgc...27...tctttatgaccaggtgagat	GTTGGtgAGC	AggTAAAA
P.Abe	gtgaattc	c-tgggccagcgc...27...tctttatgaccaggtgagat	GTTGGtgAGC	AggTAAAA
C.Jac	gtgaattc	c-tgggccagcgc...27...tctttatgacctggtgagat	GTTGGtgAGC	AggTAAAA
M.Mus	gtgaattc	cttaggccaacg...28...tctttatgaccaggtgagat	GTTGGtgAGC	AggTAAAA
C.Por	gtgaattc	c-tgggccagcgc...27...tctttatgaccaggtgagat	GTTGGtgAGC	AggTAAAA
O.Cun	gtgaattc	c-tgggccagcgc...27...tctttatgaccaggtgagat	GTTGGtgAGC	AggTAAAA
C.Fam	gcgaattc	c-tgggccagcgc...27...tctttatgaccaggtgagat	GTTGGtgAGC	AggTAAAA
B.Tau	gcgaattc	c-tgggctagcgc...27...tctttatgaccaggtgagat	GTTGGtgAGC	AggTAAAA
E.Cab	gtgaattc	c-tgggctagcgc...27...tctttatgaccaggtgagat	GTTGGtgAGC	AggTAAAA
S.Sus	gtgaattc	c-tgggctagcgc...27...tctttatgaccaggtgagat	GTTGGtgAGC	AggTAAAA
L.Afr	gtgaattc	c-tgggccggcgc...27...tctttatgaccaggtgagat	GTTGGtgAGC	AggTAAAA
	* ** ** *	***** ** *	***** ** *	***** ** *

id=561149 gene=ENSG00000137203 name=TFAP2A segment=chr6.10419788.10419856.-1 type=EN

H.Sap	acatatgc	tcccttatctct...804...acaagctctgaggagagggc	TTTGaTGCTCTAAT	tggcgc	atgcg	tcttccgg...352...-ttggccctctag	g--agaagtg
R.Mac	acatatgc	tcccttatctct...791...acaagctctgaggagagggc	TTTGaTGCTCTAAT	tggcgc	atgcg	tcttccgg...352...-ttggccctctag	g--agaagtg
P.Tro	acatatgc	tcccttatctct...804...acaagctctgaggagagggc	TTTGaTGCTCTAAT	tggcgc	atgcg	tcttccgg...352...-ttggccctctag	g--agaagtg
P.Abe	acatatgc	tcccttatctct...804...acaagctctgaggagagggc	TTTGaTGCTCTAAT	tggcgc	atgcg	tcttccgg...352...-ttggccctctag	g--agaagtg
C.Jac	acatatgc	tcccttatctct...800...acaagctctgaggagagggc	TTTGaTGCTCTAAT	tggcgc	atgcg	tcttccgg...352...-ctggccctctag	a--gcaagtg
M.Mus	ccatatac	ttcc-tacctctt...800...acaagctctgcagagagggc	TTTGaTGCTCTAAT	tggcgc	atgcg	tcttccgg...352...-ttggcctttaa	g--ccagcta
C.Por	acatatgc	tcgcttatctct...807...acaagctctgaggagagggc	TTTGaTGCTCTAAT	tggcgc	atgcg	tcttccgg...351...-ctggccttttag	g--acaagag
O.Cun	acatatgc	tcccttatctct...785...acaagctctgaggagagggc	TTTGaTGCTCTAAT	tggcgc	atgcg	tcttccgg...329...-ttggcctttag	ggaccag--a
C.Fam	acatatgc	tcccttatctct...838...acaagctctgcagagagggc	TTTGaTGCTCTAAT	tggcgc	atgcg	tcttccgg...351...-ttggcctttag	g--acaagtg
B.Tau	acatatgc	tcccttatctct...819...acaagctccggagagagggc	TTTGaTGCTCTAAT	tggcgc	atgcg	tcttccgg...354...-ttggcctttag	g--gtaagtg
E.Cab	acatgtgc	tcccttatctct...837...acaagctctgaggagagggc	TTTGaTGCTCTAAT	tggcgc	atgcg	tcttccgg...351...-ttggccttttag	g--acaagtg
S.Sus	acatatgc	ccccttatctct...832...acaagctcagggagagggc	TTTGaTGCTCTAAT	tggcgc	atgcg	tcttccgg...354...-ttggcctttag	g--atccgtg
L.Afr	acatatgc	tcccttatctct...800...acaagctctgaggagagggc	TTTGaTGCTCTAAT	tggcgc	atgcg	tcttccgg...350...ctggccttct-t	g--ataagtg
	*** ** *	* ** ** *	***** ** *	***** ** *	***** ** *	***** ** *	***** ** *

id=561193 gene=ENSG00000137203 name=TFAP2A segment=chr6.10401025.10402258.-1 type=IN VIEW

Figure 110:



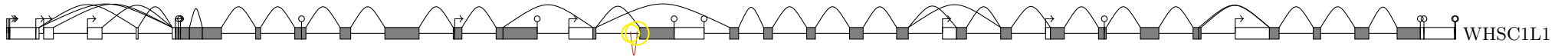
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R. Mac	aaaagctt	agaacaatcctt...148...catatacattggcagaataa	CTTCTGATCTCGC	tctcctaagttaggatcaag...238...tttggggcggga	ggggtttt
P. Abe	aaaagctt	agaacaatcctt...148...catatacattggcagaataa	CTTCTGATCTCGC	tctcctaagttaggatcaag...238...tttggggcggga	ggggtttt
C. Jac	aaaagctt	agaacaatcctt...148...catatacattggcagaataa	CTTCTGATCTCGC	tctcctaagttaggatcaag...238...tttggggcggga	ggggttta
M. Mus	aaaagctt	agaacaatcctt...142...catatacattggcagaataa	CTTCTGATCTCGC	tctcctaagttaggatcaag...237...tttggggcggga	ggggttca
R. Nor	aaaagctt	agaacaatcctt...139...cgtagacattggcagaataa	CTTCTGATCTCGC	tctcctaagttaggatcaag...237...tttggggcggga	ggggttca
C. Por	aaaagctt	agaacaatcctt...144...catatacattggcagaataa	CTTCTGATCTCGC	tctcctaagttaggatcaag...238...tttggggcggga	ggggttta
O. Cun	aaaagctt	agaacaatcctg...144...catatacattggcagaataa	CTTCTGATCTCGC	tctcctaagttaggatcaag...238...tttggggcggga	ggggttta
C. Fam	aaaagctt	agaacaatcctt...148...catagacattggcagaataa	CTTCTGATCTCGC	tctcctaagttaggatcaag...238...tttggggcggga	ggggttta
F. Cat	aaaagctt	agaacaatcctt...148...catatacattggcagaataa	CTTCTGATCTCGC	tctcctaagttaggatcaag...238...tttggggcggga	ggggttta
E. Cab	aaaagctt	agaacaatcctt...148...catatacattggcagaataa	CTTCTGATCTCGC	tctcctaagttaggatcaag...238...tttggggcggga	ggggttta
S. Sus	aaaagctt	agaataatcctt...147...catatacattggcagaataa	CTTCTGATCTCGC	tctcctaagttaggatcaag...237...tttggggcggga	ggggttta
L. Afr	aaaagctt	agaacaatcctt...369...catatacatgggcagaataa	CTTCTGATCTCGC	tctcctaagttaggatcaag...238...tttggggcggga	ggggtttt
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id=187776 gene=ENSG00000147548 name=WHSC1L1 segment=chr8_38176810_38177272_-1 type=IN

H. Sap	acagaaaag	gtgagttaatat...778...gaaaagacatcg---cgatcgct	GCGAGATTAGGAG	gcctgattgcggttggtttccaccattccaca-g	ggtcggcg
R. Mac	acagaaaag	gtgagttatgtagt...783...gaaaagacatcg---cgatcgct	GCGAGATTAGGAG	gcctgattgcggttggtttccaccattccaca-g	ggtcggcg
P. Abe	acagaaaag	gtgagttaatat...781...gaaaagacatcg---cgatcgct	GCGAGATTAGGAG	gcctgattgcggttggtttccaccattccaca-g	ggtcggcg
C. Jac	acagaaaag	gtgagttaatat...809...gaaaagacatcg---cgatcgct	GCGAGATTAGGAG	gcctgattgcggttggtttccaccattccaca-g	ggtcggcg
M. Mus	acagaaaag	gtgagttactct...882...---agacatcgcgatcgatcgct	GCGAGATTAGGAG	gcctgattgcggttggtttccaccattccaca-g	ggtcggcg
R. Nor	acagaaaag	gtgagttcctct...831...---agacatcgcgatcgatcgct	GCGAGATTAGGAG	gcctgattgcggttggtttccaccattccaca-g	ggtcggcg
C. Por	acagaaaag	gtgagttaatat...805...gaaaagacatcg---cgatcgct	GCGAGATTAGGAG	gcctgattgcggttggtttccaccattccaca-g	ggtcggcg
O. Cun	acagaaaag	gtgagttaatat...804...gaaaagacatcg---cgatcgct	GCGAGATTAGGAG	gcctgattgcggttggtttccaccattccaca-g	ggtcggcg
C. Fam	acagaaaag	gtgagttattat...819...gaaaagacatcg---cgatcgct	GCGAGATTAGGAG	gcctgattgcggttggtttccaccattccaca-g	ggtcggcg
F. Cat	acagaaaag	gtgagttgttac...829...gaaaagacatcg---cgatcgct	GCGAGATTAGGAG	gcctgattgcggttggtttccaccattccacagg	ggtcggcg
E. Cab	acagaaaag	gtgagttattat...802...gaaaagacatcg---cgatcgct	GCGAGATTAGGAG	gcctgattgcggttggtttccaccattccaca-g	ggtcggcg
S. Sus	acaaaaag	gtgagttattat...916...---agacatcgcgatcgatcgct	GCGAGATTAGGAG	gcctgattgcggttggtttccaccattccaca-g	ggtcggcg
L. Afr	acagaaaag	gtgagttaataa...816...gaaaagacatcg---cgatcgct	GCGAGATTAGGAG	gcctgattgcggttggtttccaccattccaca-g	ggtcggcg
	*** ****	***** *	*****	*****	*****

id=187779 gene=ENSG00000147548 name=WHSC1L1 segment=chr8_38175557_38176412_-1 type=IN VIEW

Figure 111:



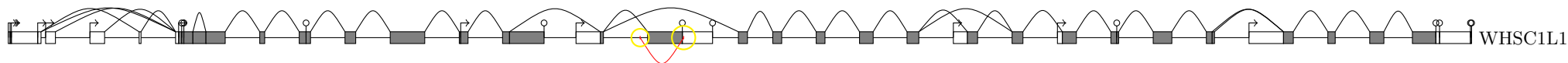
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R. Mac	acagaaag	gtgagttagat...683...	tctctgcattctcggggaga	AGTCTGCAGCGAT	ggtctccgtggagat-ctcag---	101...	accattccaca-g	ggtcggcg
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P. Abe	acagaaag	gtgagttaatat...679...	tctctgcattctcggggaga	AGTCTGCAGCGAT	ggtctccgtggagatcctca----	103...	accattccaca-g	ggtcggcg
C. Jac	acagaaag	gtgagttaatat...707...	tctctgcattctcggggaga	AGTCTGCAGCGAT	ggtctccgtggagatcctca----	103...	accattccaca-g	ggtcggcg
M. Mus	acagaaag	gtgagttactct...777...	tgtctgcactctcggggaga	AGTCTGCAGCGATGGTC	tccgtggagatcctcagcag...	102...	accattccaca-g	ggtcggcg
R. Nor	acagaaag	gtgagttcctct...726...	tgtccgcactctcggggaga	AGTCTGCAGCGATGGTC	tccgtggagatcctcagcag...	102...	accattccaca-g	ggtcggcg
S. Por	acagaaag	gtgagttaatat...703...	tctctgcattctcggggaga	AGTCTGCAGCGAT	ggtctccgtggagatcctca----	103...	accattccaca-g	ggtcggcg
C. Fam	acagaaag	gtgagttattat...717...	tctctgcattctcggggaga	AGTCTGCAGCGAT	ggtctccgtggagatcctca----	103...	accattccaca-g	ggtcggcg
F. Cat	acagaaag	gtgagttgttac...727...	tctctgcattctcggggaga	AGTCTGCAGCGAT	ggtctccgtggagatcctca----	104...	ccattccacagg	ggtcggcg
B. Tau	acaaaaag	gtgagttattta...732...	tctctgcattctcggggaga	AGTCTGCAGCGAT	ggtctccgtggagatcctca----	103...	accattccaca-g	ggtcggcg
E. Cab	acagaaag	gtgagttattat...700...	tctctgcattctcggggaga	AGTCTGCAGCGAT	ggtctccgtggagatcctca----	103...	accattccaca-g	ggtcggcg
S. Sus	acaaaaag	gtgagttattat...810...	tctctgcattctcggggaga	AGTCTGCAGCGATGGTC	tccgtggagatcctcagcag...	103...	accattccaca-g	ggtcggcg
L. Afr	acagaaag	gtgagttaataa...714...	tctctgcattctcggggaga	AGTCTGCAGCGAT	ggtctccgtggagatcctca----	103...	accattccaca-g	ggtcggcg
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id=187779 gene=ENSG00000147548 name=WHSC1L1 segment=chr8_38175557_38176412.-1 type=IN

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R. Mac	acagaaag	gtgagttagat...777...	gctcc-agaaaagacatcgcg----	ATCGCTGCgAGATT	aggaggcctgattgcgttggtttccaccattccaca-g	ggtcggcg
P. Tro	acagaaag	gtgagttaatat...775...	-ctccaagaaaagacatcgcg----	ATCGCTGCgAGATT	aggaggcctgattgcgttggtttccaccattccaca-g	ggtcggcg
P. Abe	acagaaag	gtgagttaatat...775...	-ctccaagaaaagacatcgcg----	ATCGCTGCgAGATT	aggaggcctgattgcgttggtttccaccattccaca-g	ggtcggcg
C. Jac	acagaaag	gtgagttaatat...803...	-ctccaagaaaagacatcgcg----	ATCGCTGCgAGATT	aggaggcctgattgcgttggtttccaccattccaca-g	ggtcggcg
M. Mus	acagaaag	gtgagttactct...871...	gccccaaagaaaagacatcgGATCg	ATCGCTGCgAGATT	aggaggcctgattgcgttggtttccaccattccaca-g	ggtcggcg
R. Nor	acagaaag	gtgagttcctct...820...	gctccaagaaaagacatcgGATCg	ATCGCTGCgAGATT	aggaggcctgattgcgttggtttccaccattccaca-g	ggtcggcg
C. Por	acagaaag	gtgagttaatat...799...	-ctccaagaaaagacatcgcg----	ATCGCTGCgAGATT	aggaggcctgattgcgttggtttccaccattccaca-g	ggtcggcg
C. Fam	acagaaag	gtgagttattat...813...	-ctccaagaaaagacatcgcg----	ATCGCTGCgAGATT	aggaggcctgattgcgttggtttccaccattccaca-g	ggtcggcg
F. Cat	acagaaag	gtgagttgttac...823...	-ctccaagaaaagacatcgcg----	ATCGCTGCgAGATT	aggaggcctgattgcgttggtttccaccattccacagg	ggtcggcg
B. Tau	acaaaaag	gtgagttattta...828...	-ctccaagaaaagacatcgcg----	ATCGCTGCgAGATT	aggaggcctgattgcgttggtttccaccattccaca-g	ggtcggcg
E. Cab	acagaaag	gtgagttattat...796...	-ctccaagaaaagacatcgcg----	ATCGCTGCgAGATT	aggaggcctgattgcgttggtttccaccattccaca-g	ggtcggcg
S. Sus	acaaaaag	gtgagttattat...905...	gctccaagaaaagacatcgGATCg	ATCGCTGCgAGATT	aggaggcctgattgcgttggtttccaccattccaca-g	ggtcggcg
L. Afr	acagaaag	gtgagttaataa...810...	-ctccaagaaaagacatcgcg----	ATCGCTGCgAGATT	aggaggcctgattgcgttggtttccaccattccaca-g	ggtcggcg
	*** **	***** *	* ** **	*****	*****	*****

id=187779 gene=ENSG00000147548 name=WHSC1L1 segment=chr8_38175557_38176412.-1 type=IN VIEW

Figure 112:



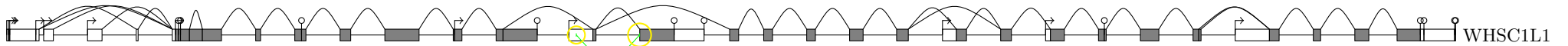
H.Sap	acagaaag	gtgagttaatat...700...tgcagc	gatggtctccgtgg	AGATCct	CAGCAGAACT	gaacagcctctcggaggga-...76...accattccaca-g	ggtcggcg
R.Mac	acagaaag	gtgagtagtat...707...tgcagc	gatggtctccgtgg	AGATCct	CAGCAGAACT	gaacagcctctcggaggga-...75...accattccaca-g	ggtcggcg
P.Tro	acagaaag	gtgagttaatat...703...tgcagc	gatggtctccgtgg	AGATCct	CAGCAGAACT	gaacagcctctcggaggga-...76...accattccaca-g	ggtcggcg
P.Abe	acagaaag	gtgagttaatat...703...tgcagc	gatggtctccgtgg	AGATCct	CAGCAGAACT	gaacagcctctcggaggga-...76...accattccaca-g	ggtcggcg
C.Jac	acagaaag	gtgagttaatat...731...tgcagc	gatggtctccgtgg	AGATCct	CAGCAGAACT	gaacagcctctcggaggga-...76...accattccaca-g	ggtcggcg
M.Mus	acagaaag	gtgagttactct...801...tgcagc	gatggtctccgtgg	AGATCct	CAGCAGAACT	gaac-gcctctcggaggga-...79...accattccaca-g	ggtcggcg
R.Nor	acagaaag	gtgagttctct...750...tgcagc	gatggtctccgtgg	AGATCct	CAGCAGAACT	gaac-gcctctcggaggga-...79...accattccaca-g	ggtcggcg
C.Por	acagaaag	gtgagttaatat...727...tgcagc	gatggtctccgtgg	AGATCct	CAGCAGAACT	gaacagcctctcggaggga-...76...accattccaca-g	ggtcggcg
O.Cun	acagaaag	gtgagttaatat...726...tgcagc	gatggtctccgtgg	AGATCct	CAGCAGAACT	gaacagcctctcggaggga-...76...accattccaca-g	ggtcggcg
C.Fam	acagaaag	gtgagttattat...741...tgcagc	gatggtctccgtgg	AGATCct	CAGCAGAACT	gaacagcctctcggaggga-...76...accattccaca-g	ggtcggcg
F.Cat	acagaaag	gtgagttgttac...751...tgcagc	gatggtctccgtgg	AGATCct	CAGCAGAACT	gaacagcctctcggaggga-...77...-ccattccacagg	ggtcggcg
E.Cab	acagaaag	gtgagttattat...724...tgcagc	gatggtctccgtgg	AGATCct	CAGCAGAACT	gaacagcctctcggaggga-...76...accattccaca-g	ggtcggcg
S.Sus	acaaaaag	gtgagttattat...834...tgcagc	gatggtctccgtgg	AGATCct	CAGCAGAACT	gaacagcctctcggaggga-...80...accattccaca-g	ggtcggcg
L.Afr	acagaaag	gtgagttaataa...738...tgcagc	gatggtctccgtgg	AGATCct	CAGCAGAACT	gaacagcctcggaggga-...76...accattccaca-g	ggtcggcg
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id=187779 gene=ENSG00000147548 name=WHSC1L1 segment=chr8_38175557_38176412_-1 type=IN

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R.Mac	ttttgcac	tattGTTTgGCTGGATT	gtattacacacagttttaa...381...atttgaagcta	cacagtgt
P.Tro	ttttgcac	tattGTTTgGCTGGATT	gtattacacacagttttaa...389...atttgaagcta	cacagtgt
P.Abe	ttttgcac	tattGTTTgGCTGGATT	gtattacacacagttttaa...391...atttgaagcta	cacagtgt
C.Jac	ttttgcac	tattGTTTgGCTGGATT	gtattacacacagttttaa...386...atttgaagcta	cacagtgt
M.Mus	ttttgcac	tattGTTTgGCTGGATT	gtattacacagcagttttaa...376...atctgtaacta	cactgtgt
R.Nor	ttttgcac	tattGTTTgGCTGGATT	gtattacacagcagttttaa...383...gtctgtgagcta	cactgtgt
C.Por	ttttgcac	tattGTTTgGCTGGATT	gtattacacagagttttaa...383...atttgaagcta	cacagtgt
O.Cun	ttttgcac	tattGTTTgGCTGGATT	gtattacacacagttttaa...390...atttgaagcta	cacaatgt
C.Fam	ttttgcac	tattGTTTgGCTGGATT	gtattacacacagttttaa...387...atttgaagcta	cacagtgt
F.Cat	ttttgcac	tattGTTTgGCTGGATT	gtattacacacagttttaa...401...atttgaagcta	cacagtgt
E.Cab	ttttgcac	tattGTTTgGCTGGATT	gtattacacacagttttaa...388...atttgaagcta	cacagtgt
S.Sus	ttttgcac	tattGTTTgGCTGGATT	gtattacacacagttttaa...404...atttgaagcta	cacattgt
L.Afr	ttttgcac	tattGTTTgGCTGGATT	gtattacacacagttttaa...390...atttgaagcta	cacagtgt
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id=187781 gene=ENSG00000147548 name=WHSC1L1 segment=chr8_38173935_38174372_-1 type=AN VIEW

Figure 113:



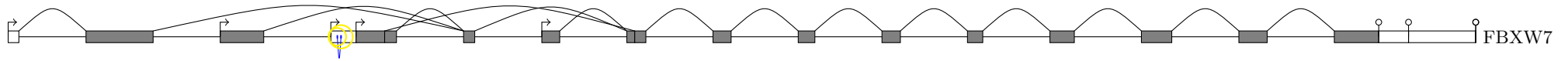
H. Sap	gggcggga	ggggttttagc-...63...ttgttctctcatataccaa	GGGA	TGGTGGGAA	aagtccttgctagagagcat----	210...ctgtccaacag	gttgaaac
R. Mac	gggcggga	ggggttttagc-...63...ttgttctctcatataccaa	GGGA	TGGTGGGAA	aagtccttgctagagagcat----	211...ctgtccaacag	gttgaaac
P. Tro	ggngggga	ggggttttagn-...62...ctgttctctcatataccaa	GGGA	TGGTGGGAA	aagtccttgctagagagcat----	210...ctgtccaacag	gttgaaac
P. Abe	gggcggga	ggggttttagc-...63...ttgttctctcatataccaa	GGGA	TGGTGGGAA	aagtccttgctagagagcat----	209...ctgtccaacag	gttgaaac
C. Jac	gggcggga	ggggtttatagc-...63...ttgttctcttataccaa	GGGA	TGGTGGGAA	aagtccttgctagagagcat----	210...ctgtccaacag	gttgaaac
R. Nor	gggcggga	ggggttcatagc-...63...tggttctcctcaagcaccag	GGGA	TGGTGGGAA	--gtccttgctaaagagcatga--	210...ctgtccaacag	gttgaaac
C. Por	gggcggga	ggggtttatagc-...61...tccttttttcatataccaa	GGGA	TGGTGGGACGT	ccttgctagagagcatgtgg...	210...ctgtccaacag	gttgaaac
O. Cun	gggtggga	gggctttatagc-...63...tcgtcctgtcatctactga	GGGA	TGGTGGGAA	aaatcctggctagagagcat----	184...ctgtccaacag	gttgaaac
C. Fam	gggcggga	ggggtttatagc-...63...ttgttctcgtcattaccaa	GGGA	TGGTGGGAA	aagtccttgctagagagcat----	209...ctgtccaacag	gttgaaac
F. Cat	gggcggga	ggggtttatagc-...63...ttgttctctcatataccaa	GGGA	TGGTGGGAA	aagtccttgctagaagcat----	208...ctgtccatacag	gttgaaac
E. Cab	gggcggga	ggggtttatagc-...62...ttgttctctcgtataccga	GGGA	TGGTGGGAA	--gtccttgcaagcaagcatgt--	207...ctgtccaacag	gttgaaac
S. Sus	gggcggga	ggggtttatagc-...63...gtgttctctcgtgtaccaa	GGGA	TGGTGGGAA	aggccttctcctcaagagcat----	214...ctgtccaacag	gttgaaac
L. Afr	gggcggga	gggg-ttttagca...66...tcgttctctcatatagtaa	GGGA	TGGTGGGAA	aaagccttgctagagagcat----	211...ctaccatacag	gttgaaac
	*** **	*** * **	* * *	**** * **	* * *	****	** ** *

id=187777 gene=ENSG00000147548 name=WHSC1L1 segment=chr8_38176459_38176809_-1 type=AN

H. Sap	acagaaag	gtgagttaatat...807...---ggaggcctgattgcgttgtg	TTTCCACCATTCC	aca-g	ggtcggcg
R. Mac	acagaaag	gtgagttatgat...812...---ggaggcctgattgcgttgtg	TTTCCACCATTCC	aca-g	ggtcggcg
P. Tro	acagaaag	gtgagttaatat...810...---ggaggcctgattgcgttgtg	TTTCCACCATTCC	aca-g	ggtcggcg
P. Abe	acagaaag	gtgagttaatat...810...---ggaggcctgattgcgttgtg	TTTCCACCATTCC	aca-g	ggtcggcg
C. Jac	acagaaag	gtgagttaatat...838...---ggaggcctgattgcgttgtg	TTTCCACCATTCC	aca-g	ggtcggcg
R. Nor	acagaaag	gtgagttcctct...860...---ggaggcctgattgcgttgtg	TTTCCACCATTCC	aca-g	ggtcggcg
C. Por	acagaaag	gtgagttaatat...831...ttaggaggcctgattgcgtt	GTGTTTCCACCATTCC	aca-g	ggtcggcg
O. Cun	acagaaag	gtgagttaatat...833...---ggaggcctgattgcgttgtg	TTTCCACCATTCC	aca-g	ggtcggcg
C. Fam	acagaaag	gtgagttattat...848...---ggaggcctgattgcgttgtg	TTTCCACCATTCC	aca-g	ggtcggcg
F. Cat	acagaaag	gtgagttgttac...858...---ggaggcctgattgcgttgtg	TTTCCACCATTCC	acagg	ggtcggcg
E. Cab	acagaaag	gtgagttattat...831...---ggaggcctgattgcgttgtg	TTTCCACCATTCC	aca-g	ggtcggcg
S. Sus	acaaaaag	gtgagttattat...945...---ggaggcctgattgcgttgtg	TTTCCACCATTCC	aca-g	ggtcggcg
L. Afr	acagaaag	gtgagttaataa...845...---ggaggcctgattgcgttgtg	TTTCCACCATTCC	aca-g	ggtcggcg
	*** **	***** *	*****	*****	*****

id=187779 gene=ENSG00000147548 name=WHSC1L1 segment=chr8_38175557_38176412_-1 type=IN VIEW

Figure 114: CS=3.9



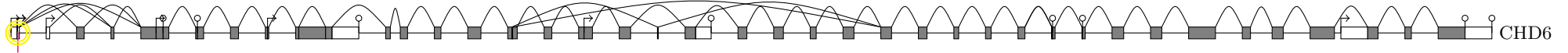
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R. Mac	gttgtgtg	cttacgggttc	ccctggagcggatcaccatataa	ttGATGTGCAGTCTG	cattgctgaatcctggactg...108...	cgttctctctca	ttattccc
P. Tro	gttgtgtg	cttacgggttc	ccctggagcggatcaccatataa	ttGATGTGCAGTCTG	cattgctgaatcctggactg...108...	cgttctctctca	ttattccc
P. Abe	gttgtgtg	cttacgggttc	ccctggagcggatcaccatataa	ttGATGTGCAGTCTG	cattgctgaatcctggactg...108...	cgttctctctca	ttattccc
C. Jac	gttgtgtg	cttacgggttc	ccctggagcggatcaccatataa	ttGATGTGCAGTCTG	cattgctgaatcctggactg...108...	cgttctctctca	ttattccc
M. Mus	gttgtgtg	cttacgggttc	ccctggagcggatcaccatataa	ttGATGTGCAGTCTG	cattgctgaatcctggactg...108...	cgttctctctca	ttattccc
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D. Cun	gccgtgtg	cgtacgggttc	ccctggagcggatcaccatataa	ttGATGTGCAGTCTG	cattgctgaatcctggactg...108...	cgctgcctctca	ttattccc
C. Fam	gttgtgtg	cttacgggttc	ccctggagcggatcaccatataa	ttGATGTGCAGTCTG	cattgctgaatcctggactg...108...	ggttctctctca	ttattccc
F. Cat	gttgtgtg	cttacgggttc	ccctggagcggatcaccatataa	ttGATGTGCAGTCTG	cattgctgaatcctggactg...108...	ggttctctctca	ttattccc
B. Tau	gctgtgtg	cttacgggttc	ccctggagcggatcaccatataa	ttGATGTGCAGTCTG	cattgctgaatcctggactg...108...	ggttctctctca	ttattccc
E. Cab	gttgtgtg	cttacgggttc	ccctggagcggatcaccatataa	ttGATGTGCAGTCTG	cattgctgaatcctggactg...108...	agttctctctca	ttattccc
L. Afr	gttgtatg	cttacgggttc	ccctggagcggatcaccatataa	ttGATGTGCAGTCTG	cattgctgaatcctggactg...108...	ggttctctctca	ttattccc
	* **	*	*****	*****	*****	*****	*****

id=232076 gene=ENSG00000109670 name=FBXW7 segment=chr4.153273923-153274110-1 type=AN

H. Sap	gttgtgtt	cttacgggttc	...29...cagtctgcattgctgaatcc	TGGACTGCA	CATTctgtgttcaaggaagatg...81...	cgttctctctca	ttattccc
R. Mac	gttgtgtg	cttacgggttc	...29...cagtctgcattgctgaatcc	TGGACTGCA	CATTctgtgttcaaggaagatg...81...	cgttctctctca	ttattccc
P. Tro	gttgtgtg	cttacgggttc	...29...cagtctgcattgctgaatcc	TGGACTGCA	CATTctgtgttcaaggaagatg...81...	cgttctctctca	ttattccc
P. Abe	gttgtgtg	cttacgggttc	...29...cagtctgcattgctgaatcc	TGGACTGCA	CATTctgtgttcaaggaagatg...81...	cgttctctctca	ttattccc
C. Jac	gttgtgtg	cttacgggttc	...29...cagtctgcattgctgaatcc	TGGACTGCA	CATTctgtgttcaaggaagatg...81...	cgttctctctca	ttattccc
M. Mus	gttgtgtg	cttacgggttc	...29...cagtctgcattgctgaatcc	TGGACTGCA	CATTctgtgttcaaggaagatg...81...	ggttctctctca	ttattccc
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D. Cun	gccgtgtg	cgtacgggttc	...29...cagtctgcattgctgaatcc	TGGACTGCA	CATTctgtgttcaaggaagatg...81...	cgctgcctctca	ttattccc
C. Fam	gttgtgtg	cttacgggttc	...29...cagtctgcattgctgaatcc	TGGACTGCA	CATTctgtgttcaaggaagatg...81...	ggttctctctca	ttattccc
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B. Tau	gctgtgtg	cttacgggttc	...29...cagtctgcattgctgaatcc	TGGACTGCA	CATTctgtgttcaaggaagatg...81...	ggttctctctca	ttattccc
E. Cab	gttgtgtg	cttacgggttc	...29...cagtctgcattgctgaatcc	TGGACTGCA	CATTctgtgttcaaggaagatg...81...	agttctctctca	ttattccc
L. Afr	gttgtatg	cttacgggttc	...29...cagtctgcattgctgaatcc	TGGACTGCA	CATTctgtgttcaaggaagatg...81...	ggttctctctca	ttattccc
	* **	*	*****	*****	*****	*****	*****

id=232076 gene=ENSG00000109670 name=FBXW7 segment=chr4.153273923-153274110-1 type=AN VIEW

Figure 115:



H.Sap	acttcacc	aaATAATAGCTGtTTGt
P.Tro	acttcacc	aaATAATAGCTGtTTGt
P.Abe	acttcacc	aaATAATAGCTGtTTGt
C.Jac	acttcacc	aaATAATAGCTGtTTGt
M.Mus	acttcacc	aaATAATAGCTGtTTGt
R.Nor	acttcacc	aaATAATAGCTGtTTGt
C.Por	acttcacc	aaATAATAGCTGtTTGt
O.Cun	acttcacc	aaATAATAGCTGtTTGt
C.Fam	acttcacc	aaATAATAGCTGtTTGt
F.Cat	acttcacc	aaATAATAGCTGtTTGt
B.Tau	acttcacc	aaATAATAGCTGtTTGt
L.Afr	acttcacc	aaATAATAGCTGtTTGt
	*****	*****

id=637504 gene=ENSG00000124177 name=CHD6 segment=chr20_40247015_40247023_-1 type=EN

H.Sap	aATAATAG	CTGtTTGT	at	tttggctgctgcaggagccattttag	gtaagt	tc
P.Tro	aATAATAG	CTGtTTGT	at	tttggctgctgcaggagccattttag	gtaagt	tc
P.Abe	aATAATAG	CTGtTTGT	at	tttggctgctgcaggagccattttag	gtaagt	tc
C.Jac	aATAATAG	CTGtTTGT	at	tttggctgctgcaggagccattttag	gtaagt	tc
M.Mus	aATAATAG	CTGtTTGT	at	tttggctgctgcaggagccattttag	gtaagt	tc
R.Nor	aATAATAG	CTGtTTGT	at	tttggctgctgcaggagccattttag	gtaagt	tc
C.Por	aATAATAG	CTGtTTGT	at	tttggctgctgcaggagccattttag	gtaagt	tc
O.Cun	aATAATAG	CTGtTTGT	at	tttggctgctgcaggagccattttag	gtaagt	tc
C.Fam	aATAATAG	CTGtTTGT	at	tttggctgctgcaggagccattttag	gtaagt	tc
F.Cat	aATAATAG	CTGtTTGT	at	tttggctgctgcaggagccattttag	gtaagt	tc
B.Tau	aATAATAG	CTGtTTGT	at	tttggctgctgcaggagccattttag	gtaagt	tc
L.Afr	aATAATAG	CTGtTTGT	at	tttggctgctgcaggagccattttag	gtaagt	tc
	*****	*****	*****	*****	*****	*****

id=637505 gene=ENSG00000124177 name=CHD6 segment=chr20_40246979_40247014_-1 type=EN VIEW

Figure 116:



H. Sap	-cggcagtg	agggtg	GCTGCGTg	TTCCGGA	AGacgtgg
R. Mac	-cggcagtg	agggtg	GCTGCGTg	TTCCGGA	AGacgtgg
P. Tro	-cggcagtg	agggtg	GCTGCGTg	TTCCGGA	AGacgtgg
P. Abe	-cggcagtg	agggtg	GCTGCGTg	TTCCGGA	AGacgtgg
M. Mus	-gcccggcg	gcggcg	GCTGCGTg	TTCCGGA	AGacgtgg
R. Nor	-gcccggcg	gcggcg	GCTGCGTg	TTCCGGA	AGacgtgg
C. Por	-cggagatg	gggccga	CTGCGTg	TTCCGGA	AGacgtgg
O. Cun	-cccgggtc	gtggtg	GCTGCGTg	TTCCGGA	AGacgtgg
C. Fam	cgcgggtgg	ggggtg	GCTGCGTg	TTCCGGA	AGacgtgg
B. Tau	-ctagagtg	ggggcg	GCTGCGTg	TTCCGGA	AGacgtgg
E. Cab	-ttggggtg	ggggtg	GCTGCGTg	TTCCGGA	AGacgtgg
S. Sus	-ctggggtg	gaggcg	GCTGCGTg	TTCCGGA	AGacgtgg
O. Avi	-ctagggtg	ggggcg	GCTGCGTg	TTCCGGA	AGacgtgg
L. Afr	-ctagggtg	ggggtg	GCTGCGTg	TTCCGGA	AGacgtgg
		*	*	*****	*****

id=471663 gene=ENSG00000111711 name=GOLT1B segment=chr12_21654727_21654748.1 type=EN

H. Sap	tTTCCGGA	AGACGTGGCg
R. Mac	tTTCCGGA	AGACGTGGCg
P. Tro	tTTCCGGA	AGACGTGGCg
P. Abe	tTTCCGGA	AGACGTGGCg
M. Mus	tTTCCGGA	AGACGTGGCg
R. Nor	tTTCCGGA	AGACGTGGCg
C. Por	tTTCCGGA	AGACGTGGcg
O. Cun	tTTCCGGA	AGACGTGGCg
C. Fam	tTTCCGGA	AGACGTGGCg
B. Tau	tTTCCGGA	AGACGTGGCg
E. Cab	tTTCCGGA	AGACGTGGCg
S. Sus	tTTCCGGA	AGACGTGGCg
O. Avi	tTTCCGGA	AGACGTGGCg
L. Afr	tTTCCGGA	AGACGTGGCg
	*****	*****

id=471664 gene=ENSG00000111711 name=GOLT1B segment=chr12_21654749_21654750.1 type=EN VIEW

Figure 117:



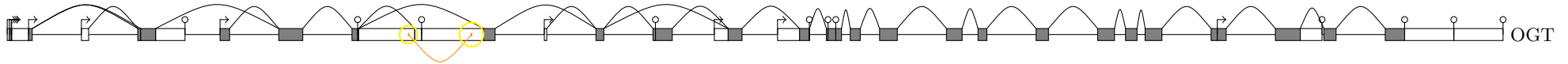
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R. Mac	--cggcag--TG	AGGGTgGCTGCGTgTTTCCGGA	agacgtgg
P. Tro	--cggcag--TG	AGGGTgGCTGCGTgTTTCCGGA	agacgtgg
P. Abe	--cggcag--TG	AGGGTgGCTGCGTgTTTCCGGA	agacgtgg
M. Mus	gcccggcggcgg	cg----GCTGCGTgTTTCCGGA	agacgtgg
R. Nor	gcccggcggcgg	cg----GCTGCGTgTTTCCGGA	agacgtgg
C. Por	---cggagat-g	GGGCCaCTGCGTgTTTCCGGA	agacgtgg
O. Cun	cccgggtcgtgg	tg----GCTGCGTgTTTCCGGA	agacgtgg
C. Fam	---cgcgggtGG	GGGGTgGCTGCGTgTTTCCGGA	agacgtgg
B. Tau	--ctagag--TG	GGGGcGCTGCGTgTTTCCGGA	agacgtgg
E. Cab	--ttgggg--TG	GGGGTgGCTGCGTgTTTCCGGA	agacgtgg
S. Sus	ctggggtggagg	cg----GCTGCGTgTTTCCGGA	agacgtgg
O. Avi	--ctaggg--TG	GGGGcGCTGCGTgTTTCCGGA	agacgtgg
L. Afr	--ctaggg--TG	GGGGTgGCTGCGTgTTTCCGGA	agacgtgg
	*	* *****	*****

id=471663 gene=ENSG00000111711 name=GOLT1B segment=chr12.21654727.21654748.1 type=EN

H. Sap	tCCGGA	AG	ACGTGGCgGCTC	TC-----g
R. Mac	tCCGGA	AG	ACGTGGCgGCTC	TC-----g
P. Tro	tCCGGA	AG	ACGTGGCgGCTC	TC-----g
P. Abe	tCCGGA	AG	ACGTGGCgGCTC	TC-----g
M. Mus	tCCGGA	AG	ACGTGGC	----ggctcggg
R. Nor	tCCGGA	AG	ACGTGGC	----ggctcggg
C. Por	tCCGGA	AG	ACGTGGCGGCTC	Tct-----
O. Cun	tCCGGA	AG	ACGTGGC	----ggctctcg
C. Fam	tCCGGA	AG	ACGTGGCgGCTC	TC-----c
B. Tau	tCCGGA	AG	ACGTGGCgGCTC	TC-----g
E. Cab	tCCGGA	AG	ACGTGGCgGCTC	TC-----a
S. Sus	tCCGGA	AG	ACGTGGC	----ggctcttg
O. Avi	tCCGGA	AG	ACGTGGCgGCTC	TT-----g
L. Afr	tCCGGA	AG	ACGTGGCgGCTC	TT-----g
	*****	**	*****	

id=471665 gene=ENSG00000111711 name=GOLT1B segment=chr12.21654751.21654757.1 type=EN VIEW

Figure 118:



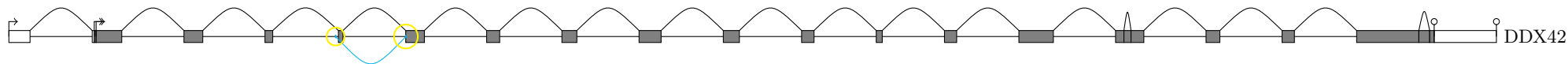
H. Sap	aagccaag	gtaggtgttga...1465... tttgtagaaaatgaagagcc	TTTCT	CCAGCAAAA	-atccctgctgtagcaatag-...31... cccatattacag	acttgaga
R. Mac	aagccaag	gtaggtgttga...1461... tttgtagaaaatgaagagcc	TTTCT	CCAGCAAAA	-atccctgctgtagcaatag-...31... cccatgttacag	acttgaga
P. Abe	aagccaag	gtaggtgttga...1467... tttgtagaaaatgaagagcc	TTTCT	CCAGCAAAA	-atccctgctgtagcaatag-...31... cccatattacag	acttgaga
C. Jac	aagccaag	gtaggtgttga...1467... tttgtagaaaatgaagagcc	TTTCT	CCAGCAAAA	-atccctgctgtagcaatag-...31... cccatgttacag	acttgaga
M. Mus	aagccaag	gtaggtgttgc...1524... tttaaagaaagtgaagagcc	TTTCT	CCAGCAAAA	-ctccctgctgtagcaatag-...31... cccatgttacag	acttgaga
R. Nor	aagccaag	gtaggtgttgc...1499... tttgtagaaaatgaagagcc	TTTCT	CCAGCAAAA	-atccctgctgtagcaatag-...31... cccatgttacag	acttgaga
C. Por	aagccaag	gtaggtgttga...1416... tttatagaaatgaagagcc	TTTCT	CCAGCAAAA	-atccccgctgtagcaatag-...31... cccatgttacag	acttgaga
O. Cun	aagccaag	gtaggtgttga...1465... tttgtagaaaacgaagagcc	TTTCT	CCAGCAAAA	-atccctgctgtagcaatag-...31... cccatgttacag	acttgaga
C. Fam	aagccaag	gtaggtgttga...1472... tttgtagaaaacgaagagcc	TTTCT	CCAGCAAAA	-aatccctgct-tatgcaatag-...31... cccatgttacag	acttgaga
F. Cat	aagccaag	gtaggtgttga...1462... tttgtagaaaacgaagagcc	TTTCT	CCAGCAAAA	-atccctgctgtagcaatag-...31... cccatattacag	acttgaga
B. Tau	aagccaag	gtaggtgttga...1456... tttgtagaaaataaagagcc	TTTCT	CCAGCAAAA	-tccctgctgtagcaatagc...30... cccatattacag	acttgaga
E. Cab	aagccaag	gtaggttttga...1462... tttgtagaaaatgaagagcc	TTTCT	CCAGCAAAA	-atccctgctgtagcaatag-...31... cccatgttacag	acttgaga
S. Sus	aagccaag	gtaggtgttga...1472... tttgtagaaaacgaagagcc	TTTCT	CCAGCAAAA	-atccctgctgtagcaata...32... cccatattacag	acttgaga
O. Avi	aagccaag	gtaggtgttga...1458... tttgtagaaaataaagagcc	TTTCT	CCAGCAAAA	-tccctgctgtagcaatagc...30... cccatattacag	acttgaga
L. Afr	aagccaag	gtaggtgttga...1459... tttgtagaaaatgaagagcc	TTTCT	CCAGCAAAA	-atccctgctgtagcaatag-...31... cccatgttacag	acttgaga
*****	*****	*****	*****	*****	*****	*****

id=308336 gene=ENSG00000147162 name=OGT segment=chrX_70764486-70766060_1 type=AN

H. Sap	aactttaa	ctaatgatcctg...1456... agcctatgctgcagggtcac	TTTTG	CTGGtc	AGAGA	aggaataatgatatcacctt...89... accctcct-aag	gcatgtta
R. Mac	aactttaa	ctaatgatcctg...1456... agcctatgctgcagggtcac	TTTTG	CTGGtc	AGAGA	aggaataatgatatcacctt...88... accctcct-aag	gcatgtta
P. Abe	aactttaa	ctaatgatcctg...1457... agcctatgctgcagggtcac	TTTTG	CTGGtc	AGAGA	aggaataatgatatcacctt...89... accctcct-aag	gcatgtta
C. Jac	aactttaa	ctaatgatcctg...1458... agcctatgctgcagggtcac	TTTTG	CTGGtc	AGAGA	aggaataatgatatcacctt...87... accctcct-aag	gcatgtta
M. Mus	aactttaa	ctaatgatcctg...1542... agcctatgctgcagggtcac	TTTTG	CTGGtc	AGAGA	aggaataatgatatcacctt...88... aaccctcct-aag	gcatgtta
R. Nor	aactttaa	ctaatgatcctg...1737... agcctatgctgcagggtcac	TTTTG	CTGGtc	AGAGA	aggaataatgatatcacctt...87... aaccctcct-aag	gcatgtta
C. Por	aactttaa	ctaatgatcctt...1420... agcctatgctgcagggtcac	TTTTG	CTGGtc	AGAGA	aggaataatgatatcacctt...82... accctcct-aag	gcatgtta
O. Cun	aactttaa	ctaatgatcctg...1405... agcctatgctgcagggtcac	TTTTG	CTGGtc	AGAGA	aggaataatgatatcacctt...86... accctcct-aag	gcctgtta
C. Fam	aactttaa	ctaatgatcctg...1479... agcctatgctgcagggtcac	TTTTG	CTGGtc	AGAGA	aggaataatgatatcacctt...85... -cccctcctaaag	gcatgtta
F. Cat	aactttaa	ctaatgatcctg...1470... agcctatgctgcagggtcac	TTTTG	CTGGtc	AGAGA	aggaataatgatatcacctt...92... ccccccct-aag	gcatgtta
B. Tau	aactttaa	ctaatgatcctg...1466... agcctatgctgcagggtcac	TTTTG	CTGGtc	AGAGA	aggaataatgatatcacctt...92... accctcct-aag	gcatgtta
E. Cab	aactttaa	ctaatgatcctg...1472... agcctatgctgcagggtcac	TTTTG	CTGGtc	AGAGA	aggaataatgatatcacctt...91... accctcct-aag	gcatgtta
S. Sus	aactttaa	ctaatgatcctg...1462... agcctatgctgcagggtcac	TTTTG	CTGGtc	AGAGA	aggaataatgatatcacctt...90... aaccctcct-aag	gcatgtta
O. Avi	aactttaa	ctaatgatcctg...1473... agcctatgctgcagggtcac	TTTTG	CTGGtc	AGAGA	aggaataatgatatcacctt...86... accctcct-aag	gcatgtta
L. Afr	aactttaa	ctaatgatcctg...1448... agcctatgctgcagggtcac	TTTTG	CTGGtc	AGAGA	aggaataatgatatcacctt...86... accctcct-aag	gcatgtta
*****	*****	*****	*****	*****	*****	*****	*****

id=308338 gene=ENSG00000147162 name=OGT segment=chrX_70766131-70767756_1 type=AN VIEW

Figure 119:



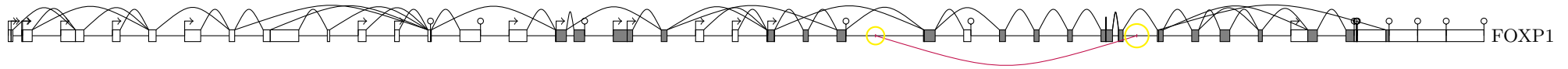
H.Sap	aacgtaaa	gtaagttgtttt...1420...	ggagctgggtatgtggaaca	TTGCAGGGAAGT	ttgtttctccgctgtttttccag	gggtattc
R.Mac	aatgtaaa	gtaagttgtttt...1429...	ggagctgggtatgtggaaca	TTGCAGGGAAGT	ttgtttctccgctgtttttccag	gggtattc
P.Tro	aacgtaaa	gtaagttgtttt...1420...	ggagctgggtatgtggaaca	TTGCAGGGAAGT	ttgtttctccgctgtttttccag	gggtattc
P.Abe	aacgtaaa	gtaagttgtttt...1421...	ggagctgggtatgtggaaca	TTGCAGGGAAGT	ttgtttctccgctgtttttccag	gggtattc
C.Jac	aatgtaaa	gtaagttgtttt...1457...	ggagctcggtatgtggaaca	TTGCAGGGAAGT	ttgtttctccgctgtttttccag	gggtattc
M.Mus	aacgtcaa	gtaagttttttt...1436...	ggagctgggtatgtggaaca	TTGCAGGGAAGT	ttgtttctccgctgtttttccag	gggtattc
R.Nor	aacgtaaa	gtaagttgttcc...1406...	ggagctgggtatgtggaaca	TTGCAGGGAAGT	ttgtttctccgctgtttttccag	gggtattc
C.Por	aatgtaaa	gtaagttgtttt...1282...	ggagctgggtatgtggaaca	TTGCAGGGAAGT	ttgtttctccgctgtttttccag	gggtattc
O.Cun	aacgtaaa	gtaagttgtttt...1259...	ggagctgggtatgtggaaca	TTGCAGGGAAGT	ttgtttctccgctgtttttccag	gggtattc
C.Fam	aacgtaaa	gtaagttgtttt...1278...	ggagctgggtatgtggaaca	TTGCAGGGAAGT	ttgtttctccgctgtttttccag	gggtattc
B.Tau	aacgtaaa	gtaagttgtttt...1224...	ggagctgggtatgtggaaca	TTGCAGGGAAGT	ttgtttctccgctgtttttccag	gggtattc
E.Cab	aatgtaaa	gtaagttgtttt...1287...	ggagctgggtatgtggaaca	TTGCAGGGAAGT	ttgtttctccgctgtttttccag	gggtattc
S.Sus	aacgtgaa	gtaagttgtttt...1237...	ggagctgggtatgtggaaca	TTGCAGGGAAGT	ttgtttctccgctgtttttccag	gggtattc
L.Afr	aacgtaaa	gtaagttgtttt...1334...	ggagctgggtatgtggaaca	TTGCAGGGAAGT	ttgtttctccgctgtttttccag	gggtattc
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id=393994 gene=ENSG00000198231 name=DDX42 segment=chr17_61875460_61876948_1 type=IN

H.Sap	atgaccaa	gtgagttcctat...798...	gggtgtgattatgttcttgt	GCTTTCCTGCAG	Gaagctta
R.Mac	atgaccaa	gtgagttcctat...794...	gggtgtgattatgttcttgt	GCTTTCCTGCAG	Gaagctta
P.Tro	atgaccaa	gtgagttcctat...798...	gggtgtgattatgttcttgt	GCTTTCCTGCAG	Gaagctta
P.Abe	atgaccaa	gtgagttcctat...798...	gggtgtgattatgttcttgt	GCTTTCCTGCAG	Gaagctta
C.Jac	atgaccaa	gtgagttcctat...777...	gggtgtgattatgttcttgt	GCTTTCCTGCAG	Gaagctta
M.Mus	atgaccaa	gtgagtttctat...721...	aggttgattgtgctcttgt	GCTTTCCTGCAG	Gaagctta
R.Nor	atgaccaa	gtgagtttctat...691...	agagttgattgtgctcttgt	GCTTTCCTGCAG	Gaagctta
C.Por	atgaccaa	gtgagttcctat...771...	gagtgcgattatgtttttgt	GCTTTCCTGCAG	Gaagctta
O.Cun	atgatcaa	gtgagttcctat...791...	gagtgtgattagttcttgt	GCTTTCCTGCAG	Gaagctta
C.Fam	atgaccaa	gtgagttcctat...799...	gggtatgattatgttcttgt	GCTTTCCTGCAG	Gaagctta
B.Tau	atgaccaa	gtgagttcctat...791...	gggtatgattatgatcttgt	GCTTTCCTGCAG	Gaagctta
E.Cab	atgaccaa	gtgagttcctat...800...	gggtatgattatgttcttgt	GCTTTCCTGCAG	Gaagctta
S.Sus	atgaccaa	gtgagttcctat...783...	gggtatgattatgttcttgt	GCTTTCCTGCAG	Gaagctta
L.Afr	atgaccaa	gtgagttcctat...816...	ggatgtgattcggttcttct	GCTTTCCTGCAG	Gaagctta
	*** **	***** **	**** * * *	*****	*****

id=393996 gene=ENSG00000198231 name=DDX42 segment=chr17_61876986_61877827_1 type=IN VIEW

Figure 120: CS=15.12



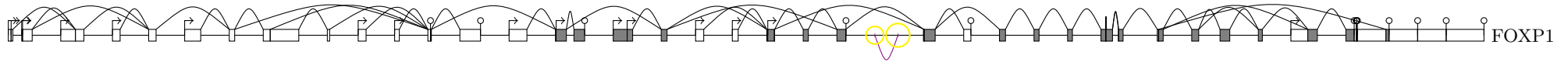
H. Sap	aag gtatg	cgttgattttac...4518...	ctatatttaataacaaagct	ATTGTCATCa	TTTAAG	-acttaagcacaaaaattatt--...390...	tgtttgtttcag	gcatgatt
R. Mac	aag gtatg	cgttcattatac...4517...	ctatatttaataacaaagct	ATTGTCATCa	TTTAAG	-acttaagcacaaaaattatt--...391...	tgtttgtttcag	gcatgatt
P. Tro	aag gtatg	cgttgattatac...4517...	ctatatttaataacaaagct	ATTGTCATCa	TTTAAG	-acttaagcacaaaaattatt--...391...	tgtttgtttcag	gcatgatt
P. Abe	aag gtatg	cattgattatac...4519...	ctatatttaataacaaagct	ATTGTCATCa	TTTAAG	-acttaagcacaaaaattatt--...389...	tgtttgtttcag	gcatgatt
C. Jac	aag gtatg	cgttgattatat...4517...	ctatatttaataacaaagct	ATTGTCATCa	TTTAAG	-acttaagcacaaaaattatt--...391...	tgtttgtttcag	gcatgatt
M. Mus	aag gtaag	cacacggcaggg...4515...	ctatatttaataacaaagct	ATTGTCATCa	TTTAAG	-acttaagcacaaaaattact--...393...	tgtttgtttcag	gcatgatt
R. Nor	aag gtaag	cgccattgcag...4520...	ctatatttaataacaaagct	ATTGTCATCa	TTTAAGAC	tttaagcacaaaaattactca...385...	tgtttgtttcag	gcatgatt
C. Por	aag gtatg	cactcatcatgg...4520...	ctgtatttaataacaaagct	ATTGTCATCa	TTTAAG	-acttaagcac-aaaattattc-...388...	tgtttgtttcag	gcatgatt
O. Cun	aag gtagg	cattcgtaccgg...4492...	ctatatttaataacaaagct	ATTGTCATCa	TTTAAG	-acttaagcacaaaaattact--...416...	tgtttgtttcag	gcatgatt
C. Fam	aag gtaag	caccattacac...4507...	ctatatttaataacaaagct	ATTGTCATCa	TTTAAG	-acttaagcacaaaaattatt--...401...	tgtttgtttcag	gcatgatt
F. Cat	aag gtaag	cctccgtgagcc...4489...	ctatatttaataacaaagct	ATTGTCATCa	TTTAAG	-acttaagcacaaaaattatt--...419...	tgtttgtttcag	gcatgatt
B. Tau	aag gtaag	cgttgatgatc...4525...	ctatatttaataacaaagct	ATTGTCATCa	TTTAAG	-acttaagcacaaaaattatt--...383...	tgtttgtttcag	gcatgatt
E. Cab	aag gtaag	cgttgattatac...4524...	ctatatttaataacaaagct	ATTGTCATCa	TTTAAG	-acttaagcacaaaaattatt--...384...	tgtttgtttcag	gcatgatt
L. Afr	aag gtagg	tgctgactgtcc...4527...	ctatatttaataacaaagct	ATTGTCATCa	TTTAAG	-acttaagcacaaaaattatt--...381...	tgtttgtttcag	gcatgatt
	*** ** *			*****	*	*****	*****	*****

id=717444 gene=ENSG00000114861 name=FOXP1 segment=chr3_71090684_71096087_-1 type=IN

H. Sap	ttaggcag	gtaagtaataa...193...	-caacagtgaaatgagcctg	TTTAAAGATGGCAAGT	caattatcac-aagctacagt...327...	tctgcttcacag	gccattct
R. Mac	ttaggcag	gtaagtaataa...190...	-caacagtgaaatgagcctg	TTTAAAGATGGCAAGT	caattatcac-aagctacagt...325...	tttgcttcacag	gccattct
P. Tro	ttaggcag	gtaagtaataa...192...	-caacagtgaaatgagcctg	TTTAAAGATGGCAAGT	caattatcac-aagctacagt...327...	tttgcttcacag	gccattct
P. Abe	ttaggcag	gtaagtaataa...192...	-caacagtgaaatgagcctg	TTTAAAGATGGCAAGT	caattatcac-aagctacagt...327...	tgtgcttcacag	gccattct
C. Jac	ttaggcag	gtaagtaataa...192...	-caacagtgaaatgagcctg	TTTAAAGATGGCAAGT	caattatcac-aagctacagt...326...	tgtgcttcacag	gccattct
M. Mus	tcaggcag	gtaagtaataa...189...	-caacagtgagaatgaggctg	TTTAAAGATGGCAAGT	caattatcacaaagctacag-...357...	tttgcttcacag	gccattct
R. Nor	ttaggcag	gtaagtaataa...188...	-acaacagtgagaatgaggctg	TTTAAAGATGGCAAGT	caattatcacaaagctacag-...364...	cttgcttcacag	gccattct
C. Por	ttaggcag	gtaagtaataa...195...	-caacagtgaaatgagcctg	TTTAAAGATGGCAAGT	caattatcac-aagctacagt...321...	ttttatttacag	gccattct
O. Cun	ttaggcag	gtaagtaataa...195...	-caacagtgaaatgagcctg	TTTAAAGATGGCAAGT	caattatcac-aagctacagt...326...	tgtgcttcacag	gccattct
C. Fam	ttaggcag	gtaagtaataa...190...	-caacagtgaaatgagcctg	TTTAAAGATGGCAAGT	caattatcac-aagctacagt...328...	ttgcttcacag	gccattct
F. Cat	ttaggcag	gtaagtaataa...196...	-caacagtgaaatgagcctg	TTTAAAGATGGCAAGT	caattatcac-aagctacagt...329...	tttgcttcacag	gccattct
B. Tau	ttaggcag	gtaagtaataa...190...	-caacagtgaaatgagcctg	TTTAAAGATGGCAAGT	caattatcac-aagctacagt...329...	ttcacttcacag	gccattct
E. Cab	ttaggcag	gtaagtaataa...189...	-caacagtgaaatgagcctg	TTTAAAGATGGCAAGT	caattatcac-aagctacagt...328...	tttgcttcacag	gccattct
L. Afr	ttaggcag	gtaagtaatta...178...	-caacagtgaaatgagcctg	TTTAAAGATGGCAAGT	caattatcac-aagctacagt...328...	tctgcttcacag	gccattct
	* * * *	*****	*	*****	*****	*****	** *****

id=717462 gene=ENSG00000114861 name=FOXP1 segment=chr3_71026194_71026793_-1 type=IN VIEW

Figure 121: CS=4.2



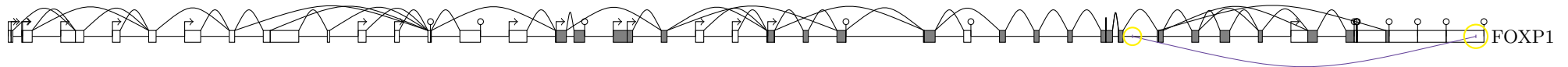
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R. Mac	aag	gtatg	cgttcattatac...4503...	gtgattaat-aaaaactatata	TTAATAACaaAGCTATTTGTC	atca-tttaagacttaagcac...401...	tgtttgtttcag	gcatgatt
P. Tro	aag	gtatg	cgttgattatac...4503...	gtgattaat-aaaaactatata	TTAATAACaaAGCTATTTGTC	atca-tttaagacttaagcac...401...	tgtttgtttcag	gcatgatt
P. Abe	aag	gtatg	cattgattatac...4505...	gtgattaat-aaaaactatata	TTAATAACaaAGCTATTTGTC	atca-tttaagacttaagcac...399...	tgtttgtttcag	gcatgatt
C. Jac	aag	gtatg	cgttgattatac...4503...	gtgattaat-aaaaactatata	TTAATAACaaAGCTATTTGTC	atca-tttaagacttaagcac...401...	tgtttgtttcag	gcatgatt
M. Mus	aag	gtaag	cacacggcaggg...4501...	gtgattaat-aaaaactatata	TTAATAACaaAGCTATTTGTC	atca-tttaagacttaagcac...403...	tgtttgtttcag	gcatgatt
R. Nor	aag	gtaag	cgccattgcag...4506...	-tgattaataaaaaactatata	TTAATAACaaAGCTATTTGTC	atcattttaagacttaagca-...398...	tgtttgtttcag	gcatgatt
C. Por	aag	gtatg	cactcatcatgg...4506...	gtgattaat-aaaaactgtata	TTAATAACaaAGCTATTTGTC	atca-tttaagacttaagcac...398...	tgtttgtttcag	gcatgatt
O. Cun	aag	gtagg	cattcgtaccgg...4478...	gtgattaat-aaaaactatata	TTAATAACaaAGCTATTTGTC	atca-tttaagacttaagcac...426...	tgtttgtttcag	gcatgatt
C. Fam	aag	gtaag	caccattacac...4493...	gtgattaat-aaaaactatata	TTAATAACaaAGCTATTTGTC	atca-tttaagacttaagcac...411...	tgtttgtttcag	gcatgatt
F. Cat	aag	gtaag	cctcctgagcc...4475...	gtgattaat-aaaaactatata	TTAATAACaaAGCTATTTGTC	atca-tttaagacttaagcac...429...	tgtttgtttcag	gcatgatt
B. Tau	aag	gtaag	cgttgatgatgc...4511...	gtgattaat-aaaaactatata	TTAATAACaaAGCTATTTGTC	atca-tttaagacttaagcac...393...	tgtttgtttcag	gcatgatt
E. Cab	aag	gtaag	cgttgattatac...4510...	gtgattaat-aaaaactatata	TTAATAACaaAGCTATTTGTC	atca-tttaagacttaagcac...394...	tgtttgtttcag	gcatgatt
L. Afr	aag	gtacg	tgctgactgtcc...4513...	gtgattaat-aaaaactatata	TTAATAACaaAGCTATTTGTC	atca-tttaagacttaagcac...391...	tgtttgtttcag	gcatgatt
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id=717444 gene=ENSG00000114861 name=FOXP1 segment=chr3_71090684_71096087_-1 type=IN

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R. Mac	aag	gtatg	cgttcattatac...4908...	ttaattactgctggttgaagag-	GACGGAATTAGCTGTTAaTTGA	ttaattatccaattgtttgtttcag	gcatgatt
P. Tro	aag	gtatg	cgttgattatac...4908...	ttaattactgctggttgaagag-	GACGGAATTAGCTGTTAaTTGA	ttaattatccaattgtttgtttcag	gcatgatt
P. Abe	aag	gtatg	cattgattatac...4908...	ttaattactgctggttgaagag-	GACGGAATTAGCTGTTAaTTGA	ttaattatccaattgtttgtttcag	gcatgatt
C. Jac	aag	gtatg	cgttgattatac...4908...	ttaattactgctggttgaagag-	GACGGAATTAGCTGTTAaTTGA	ttaattatccaattgtttgtttcag	gcatgatt
M. Mus	aag	gtaag	cacacggcaggg...4908...	ttaattactgctggttgaagag-	GACGGAATTAGCTGTTAaTTGA	ttaattatccaattgtttgtttcag	gcatgatt
R. Nor	aag	gtaag	cgccattgcag...4908...	ttaattactgctggttgaagag-	GACGGAATTAGCTGTTAaTTGA	ttaattatccaattgtttgtttcag	gcatgatt
C. Por	aag	gtatg	cactcatcatgg...4908...	ttaattactgctggttgaagag-	GACGGAATTAGCTGTTAaTTGA	ttaattatccaattgtttgtttcag	gcatgatt
O. Cun	aag	gtagg	cattcgtaccgg...4908...	ttaattactgctggttgaagag-	GACGGAATTAGCTGTTAaTTGA	ttaattatccaattgtttgtttcag	gcatgatt
C. Fam	aag	gtaag	caccattacac...4908...	ttaattactgctggttgaagag-	GACGGAATTAGCTGTTAaTTGA	ttaattatccaattgtttgtttcag	gcatgatt
F. Cat	aag	gtaag	cctcctgagcc...4908...	ttaattactgctggttgaagag-	GACGGAATTAGCTGTTAaTTGA	ttaattatccaattgtttgtttcag	gcatgatt
B. Tau	aag	gtaag	cgttgatgatgc...4908...	ttaattactgctggttgaagag-	GACGGAATTAGCTGTTAaTTGA	ttaattatccaattgtttgtttcag	gcatgatt
E. Cab	aag	gtaag	cgttgattatac...4908...	ttaattactgctggttgaagag-	GACGGAATTAGCTGTTAaTTGA	ttaattatccaattgtttgtttcag	gcatgatt
L. Afr	aag	gtacg	tgctgactgtcc...4908...	ttaattactgctggttgaagag-	GACGGAATTAGCTGTTAaTTGA	ttaattatccaattgtttgtttcag	gcatgatt
	***	***	*		*****	*****	*****

id=717444 gene=ENSG00000114861 name=FOXP1 segment=chr3_71090684_71096087_-1 type=IN VIEW

Figure 122: CS=8.4



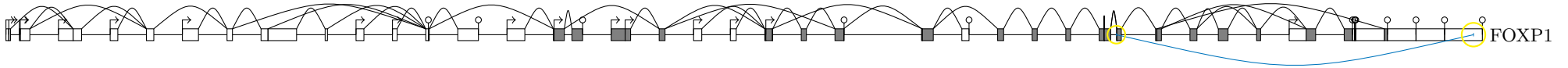
H.Sap	ttaggcag	gtaagtaaataa...116...aaaactgcaatatataacat	AATTGCtt	TTGATTAAG	tattacaatac	gatgtgatt...403...ctgcttcacag	gccattct
R.Mac	ttaggcag	gtaagtaaataa...113...aaaactgcaatatataacat	AATTGCtt	TTGATTAAG	tattacaatac	gatgtgatt...401...tttgcttcacag	gccattct
P.Tro	ttaggcag	gtaagtaaataa...115...aaaactgcaatatataacat	AATTGCtt	TTGATTAAG	tattacaatac	gatgtgatt...403...tttgcttcacag	gccattct
P.Abe	ttaggcag	gtaagtaaataa...115...aaaactgcaatatataacat	AATTGCtt	TTGATTAAG	tattacaatac	gatgtgatt...403...tgtgcttcacag	gccattct
C.Jac	ttaggcag	gtaagtaaataa...115...aaaactgcaatatataacat	AATTGCtt	TTGATTAAG	tattacaatac	gatgtgatt...402...tgtgcttcacag	gccattct
M.Mus	tcaggcag	gtaagtaaataa...112...aaaactgcaatatataacat	AATTGCtt	TTGATTAAG	tattacaatac	gatgtgatt...433...tttgcttcgtag	gccattct
R.Nor	ttaggcag	gtaagtaaataa...112...aaaactgcaatatataacat	AATTGCtt	TTGATTAAG	tattacaatac	gatgtgatt...440...cttgcttcacag	gccattct
C.Por	ttagacag	gtaagtaaataa...118...aaaactgcaatatataacat	AATTGCtt	TTGATTAAG	tattacaatac	gatgtgatt...397...ttttatttacag	gccattct
O.Cun	ttaggcag	gtaagtaaataa...118...aaaactgcaatatataacat	AATTGCtt	TTGATTAAG	tattacaatac	gatgtgatt...402...tgtgctttacag	gccattct
C.Fam	ttaggcag	gtaagtaaataa...113...aaaactgcaatatataacat	AATTGCtt	TTGATTAAG	tattacaatac	gatgtgatt...404...ttgctttatag	gccattct
F.Cat	ttaggcag	gtaagtaaataa...118...aaaactgcaatatataacat	AATTGCtt	TTGATTAAG	tattacaatac	gatgtgatt...406...tttgcttcacag	gccattct
B.Tau	ttagacag	gtaagtaaataa...113...aaaactgcaatatataacat	AATTGCtt	TTGATTAAG	tattacaatac	gatgtgatt...405...ttcacttcacag	gccattct
E.Cab	ttaggcag	gtaagtaaataa...112...aaaactgcaatatataacat	AATTGCtt	TTGATTAAG	tattacaatac	gatgtgatt...404...tttgctttatag	gccattct
O.Avi	ttaggcag	gtaagtaaataa...113...aaaactgcaatatataacat	AATTGCtt	TTGATTAAG	tattacaatac	gatgtgatt...405...ttcgcttcacag	gccattct
L.Afr	ttaggcag	gtaagtaaataa...101...aaaactgcaatatataacat	AATTGCtt	TTGATTAAG	tattacaatac	gatgtgatt...404...ctgctacatag	gccattct
		* ** **	***** *	*****	*****	** *****	*****

id=717462 gene=ENSG00000114861 name=FOXP1 segment=chr3_71026194_71026793_-1 type=IN

H.Sap	cttttgta	taaaaaaaaa...703...ggcataaaagaaactcattc	CTTGac	ATCAA	ctGTAATT	ccatcattccatgtctgcgg...106...gccacagcctaa	gtttgttt
R.Mac	cttttgta	taaaaaaaaa...709...ggcataaaagaaactcattc	CTTGac	ATCAA	ctGTAATT	ccatcattccatgtctgcgg...105...gccacagcctaa	gtttgttt
P.Tro	cttttgta	taaaaaaaaa...699...ggcataaaagaaactcattc	CTTGac	ATCAA	ctGTAATT	ccatcattccatgtctgcag...106...gccacagcctaa	gtttgttt
P.Abe	cttttgta	taaaaaaaaa...700...ggcataaaagaaactcattc	CTTGac	ATCAA	ctGTAATT	ccatcattccatgtctgcgg...106...gccacagcctaa	gtttgttt
C.Jac	cttttgta	taaaaaaaaa...698...ggcataaaagaaactcattc	CTTGac	ATCAA	ctGTAATT	ccatcattccatgtctgcgg...105...gccacagcctaa	gtttcttt
M.Mus	actttttg	tataaaaaaa...710...ggcataaaagaatctcattc	CTTGac	ATCAA	ctGTAATT	ccaccattccatgtctgtgg...106...gccacagactaa	gttttttc
R.Nor	tcttttga	tataaaaaaa...705...ggcataaaagaatctcattc	CTTGac	ATCAA	ctGTAATT	ccatcattccatgtctgtgg...109...gccacagactaa	gttttttc
C.Por	cttttgta	tataaaaaaa...705...ggcataaaagaaactcattc	CTTGac	ATCAA	ctGTAATT	ccatcattccaagtctgtga...107...gccacagcctaa	gttttttc
O.Cun	tctttata	tataaaaaaa...688...ggcataaaagaaactcattc	CTTGac	ATCAA	ctGTAATT	ccatcattccgtgtctgtgg...104...gccacagcctaa	gttttttt
C.Fam	tttttgta	tataaaaaaa...717...ggcataaaagaaactcattc	CTTGac	ATCAA	ctGTAATT	ccatcattccgtgtctgtgg...108...ggcagcctaa	gtttcttt
F.Cat	cttttttg	tataaaaaaa...736...ggcataaaagaaactcattc	CTTGac	ATCAA	ctGTAATT	ccatcattccgtgtctgtgg...112...gccacagcctaa	gtttcttt
B.Tau	tttttgta	tataaaaaaa...704...ggcataaaagaaactcattc	CTTGac	ATCAA	ctGTAATT	ccatcattccgtgtctgtgg...106...gccaccgctaa	gtttcttt
E.Cab	tttttgta	tataaaaaaa...710...ggcataaaagaaactcattc	CTTGac	ATCAA	ctGTAATT	ccatcattccgtgtctgtgg...111...gccacagcctaa	gtttcttt
O.Avi	tttttgta	tataaaaaaa...706...ggcataaaagaaactcattc	CTTGac	ATCAA	ctGTAATT	ccatcattccgtgtctgtgg...108...gccaccgctaa	gtttcttt
L.Afr	cttttgta	tataaaaaaa...682...ggcatcaaagaaactcattc	CTTGac	ATCAA	ctGTAATT	ccatcattccatgtctgtgg...103...gccacagcctaa	atttcttt
		*** *	* **	* **	*** **	* **	*** **

id=717483 gene=ENSG00000114861 name=FOXP1 segment=chr3_71003844_71004735_-1 type=E3 VIEW

Figure 124: CS=4.5



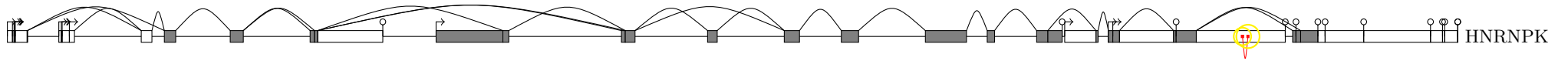
H.Sap	ttcgtcag	gtagatactcca...52...-----ttgaaaaagtgataattaatAGGAcaATGATTCTT	attcag	cagatatt
R.Mac	ttcgtcag	gtagatattcca...52...-----tttaaaaagcgataattaatAGGAcaATGATTCTT	attcag	cagatatt
P.Tro	ttcgtcag	gtagatactcca...52...-----tttaaaaagtgataattaatAGGAcaATGATTCTT	attcag	cagatatt
P.Abe	ttcgtcag	gtagatactcca...52...-----tttaaaaagtgataattaatAGGAcaATGATTCTT	attcag	cagatatt
C.Jac	ttcttcag	gtagatactcca...52...-----tttaaaaagtgataattaatAGGAcaATGATTCTT	attcag	cagatatt
M.Mus	ttcttcag	gtagctactctc...48...cccctttttaaaaagcgatcATTAatAGGAcaATGATTCT	caTTTA	g
R.Nor	ttcttcag	gtagctactctc...54...-----tttaaaaagtgatcattaatAGGAcaATGATTCT	tATTTA	g
C.Por	ttcttcag	gtagctgcttca...52...-----tttaaaagagtgataattaatAGGAcaATGATTCT	taTTTA	g
O.Cun	ttcttcag	gtagctactcca...51...-----tttaaaaagtgataattaatAGGAcaATGATTCT	taTTTA	g
C.Fam	ttcttcag	gtagatactccc...52...-----tttaaaaagtgataattaatAGGAcaATGATTCT	taTTTA	g
F.Cat	ttcttcag	gtagatactcca...51...-----tttaaaaagtgattattaatAGGAcaATGATTCT	taTTTA	g
E.Cab	ttcttcag	gtagatactcca...51...-----tttaaaaagtgataattaatAGGAcaATGATTCT	taTTTA	g
L.Afr	tacttcag	gtagatacttcg...51...-----tttaaaaagtgataattaatAGGAcaATGATTCTT	atttag	cagatatt
	* * ****	**** * *	* * ** * * * *****	*** ** *****

id=717459 gene=ENSG00000114861 name=FOXP1 segment=chr3_71026874_71026978_-1 type=IN

H.Sap	cttttgta	taaaaaaaaa...690...---ttgttttgataaggcataaAAGAAAcTCATTTCCT	tgacatcaactgtaattcca----	.123...gccacagcctaa	gtttgttt
R.Mac	cttttgta	taaaaaaaaa...696...---ttgttttgataaggcataaAAGAAAcTCATTTCCT	tgacatcaactgtaattcca----	.122...gccacagcctaa	gtttgttt
P.Tro	cttttgta	taaaaaaaaa...686...---ttgttttgataaggcataaAAGAAAcTCATTTCCT	tgacatcaactgtaattcca----	.123...gccacagcctaa	gtttgttt
P.Abe	cttttgta	taaaaaaaaa...687...---ttgttttgataaggcataaAAGAAAcTCATTTCCT	tgacatcaactgtaattcca----	.123...gccacagcctaa	gtttgttt
C.Jac	cttttgta	taaaaaaaaa...685...---ttgttttgataaggcataaAAGAAAcTCATTTCCT	tgacatcaactgtaattcca----	.122...gccacagcctaa	gtttcttt
M.Mus	acttttg	tataaaaaaat...694...tgttttgtttgataagcaTAAAAGAAAcTCATTTCCT	TGATatcaactgtaattccaccat...	.119...gccacagactaa	gttttttc
R.Nor	tcttttgta	taaaagttttt...689...tgttttgttttgataaggcaTAAAAGAAAcTCATTTCCT	tgacatcaactgtaattcca----	.126...gccacagactaa	gttttttc
C.Por	cttttgta	tgaaaaaac...689...tgttttgttttgataaggcaTAAAAGAAAcTCATTTCCT	tgacatcaactgtaattcca----	.124...gccacagcctaa	gttttttc
O.Cun	tctttata	taaaaaacct...672...tgttttgttttgataaggcaTAAAAGAAAcTCATTTCCT	tgacatcaactgtaattcca----	.121...gccacagcctaa	gttttttt
C.Fam	tttttgta	taaaaaaaaa...701...cgttttgttttgataaggcaTAAAAGAAAcTCATTTCCT	tgacatcaactgtaattcca----	.125...gagacagcctaa	gtttcttt
F.Cat	ctttttg	tataaaaaaaa...720...tgttttgttttgataaggcaTAAAAGAAAcTCATTTCCT	tgacatcaactgtaattcca----	.129...gccacagcctaa	gtttcttt
E.Cab	tttttgta	taaaaaaaaa...694...tgttttgttttgataaggcaTAAAAGAAAcTCATTTCCT	tgacatcaactgtaattcca----	.128...gccacagcctaa	gtttcttt
L.Afr	cttttgta	tgaaaaaaa...669...---ttgttttgataggcatcaAAGAAAcTCATTTCCT	tgacatcaactgtaattcca----	.120...gccacagcctaa	atttcttt
	*** *	* **	*****	** ****	*** **

id=717483 gene=ENSG00000114861 name=FOXP1 segment=chr3_71003844_71004735_-1 type=E3 VIEW

Figure 125: CS=10.14



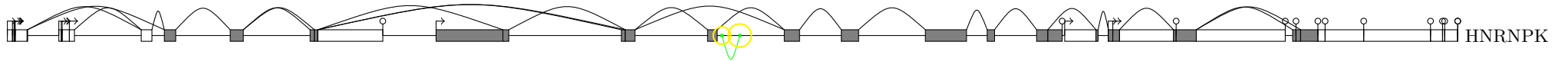
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R. Mac	cagaacag	gtcagtttaagt...290...cattggatgttggcctagtt	CTGTGTGGaAGACTaGTGA	TTTGTGTTTTTAG	---ataactaaatcgacaacaaa...278...cttgatgttgat	taagatgt
P. Tro	cagaacag	gtcagtttaagt...289...cattggatgttggcctagtt	CTGTGTGGaAGACTaGTGA	TTTGTGTTTTTAG	---ataactaaatcgacaacaaa...278...cttgatgttgat	taagatgt
P. Abe	cagaacag	gtcagtttaagt...291...cattggatgttggcctagtt	CTGTGTGGaAGACTaGTGA	TTTGTGTTTTTAG	---ataactaaatcgacaacaaa...278...cttgatgttgat	taagatgt
C. Jac	cagaacag	gtcagtttaagt...287...cattggatgttggcctagtt	CTGTGTGGaAGACTaGTGA	TTTGTGTTTTTAG	---ataactaaatcgacaacaaa...278...cttgatgttgat	taagatgt
M. Mus	cagaacag	gtcagttgaccc...295...cattggatgttggcctagtt	CTGTGTGGaAGACTaGTGA	TTTGTGTTTTTAG	---ataactaaatcgacaacaaa...270...cttaatgttgat	taagatgt
R. Nor	cagaacag	gtcagttgatgc...293...cattggatgttggcctagtt	CTGTGTGGaAGACTaGTGA	TTTGTGTTTTTAG	---ataactaaatcgacaacaaa...270...cttaatgttgat	taagatgt
O. Cun	cagaacag	gtcagttgaaga...285...cattggatgttggcctagtt	CTGTGTGGaAGACTaGTGA	TTTGTGTTTTTAG	---ataactaaatcgacaacaaa...282...cttgatgttgat	taagatgt
C. Fam	cagaacag	gtcagtttgagt...287...cattggatgttggcctagtt	CTGTGTGGaAGACTaGTGA	TTTGTGTTTTTAG	---ataactaaatcgacaacaaa...278...cttaatgttgat	taagatgt
F. Cat	cagaacag	gtcagtttgagt...286...cattggatgttggcctagtt	CTGTGTGGaAGACTaGTGA	TTTGTGTTTTTAG	---ataactaaatcgacaacaaa...276...cttaatgttgat	taagatgt
B. Tau	cagaacag	gtcagtttgagt...290...cattggatgttggcctagtt	CTGTGTGGaAGACTaGTGA	TTTGTGTTTTTAG	---ataactaaatcgacaacaaa...271...attaagattgat	taagatgt
E. Cab	cagaacag	gtcagtttgagt...287...cattggatgttggcctagtt	CTGTGTGGaAGACTaGTGA	TTTGTGTTTTTAG	---ataactaaatcgacaacaaa...281...cttaatgttgat	taagatgt
O. Avi	cagaacag	gtcagtttgagt...290...cattggatgttggcctagtt	CTGTGTGGaAGACTaGTGA	TTTGTGTTTTTAG	---ataactaaatcgacaacaaa...267...gtaagattgac	taagatgt
L. Afr	cagaacag	gtcagtttaagt...287...cattggatgttggcctagtt	CTGTGTGGaAGACTaGTGA	TTTGTGTTTTTAG	---ataactaaatcgacaacaaa...269...cttaatgttgat	taagatgt
*****	** ****	** ****	*****	*****	*****	*****

id=679179 gene=ENSG00000165119 name=HNRNPK segment=chr9.86584411.86585076_-1 type=AN

H. Sap	cagaacag	gtcagtttaagt...328...atTTTgTgTtTtTtagataa	CTAAAtcGACAACAAATCACAGTCTg	CCATATGG	cacaggccatgcctctacag---.240...cttgatgttgat	taagatgt
R. Mac	cagaacag	gtcagtttaagt...328...atTTTgTgTtTtTtagataa	CTAAAtcGACAACAAATCACAGTCTg	CCATATGG	cacaggccatgcctctacag---.240...cttgatgttgat	taagatgt
P. Tro	cagaacag	gtcagtttaagt...327...atTTTgTgTtTtTtagataa	CTAAAtcGACAACAAATCACAGTCTg	CCATATGG	cacaggccatgcctctacag---.240...cttgatgttgat	taagatgt
P. Abe	cagaacag	gtcagtttaagt...329...atTTTgTgTtTtTtagataa	CTAAAtcGACAACAAATCACAGTCTg	CCATATGG	cacaggccatgcctctacag---.240...cttgatgttgat	taagatgt
C. Jac	cagaacag	gtcagtttaagt...325...atTTTgTgTtTtTtagataa	CTAAAtcGACAACAAATCACAGTCTg	CCATATGG	cacaggccatgcctctacag---.240...cttgatgttgat	taagatgt
M. Mus	cagaacag	gtcagttgaccc...333...atTTTgTgTtTtTtagataa	CTAAAtcGACAACAAATCACAGTCTg	CCATATGG	cacaggcca--cctctacagga...232...cttaatgttgat	taagatgt
R. Nor	cagaacag	gtcagttgatgc...331...atTTTgTgTtTtTtagataa	CTAAAtcGACAACAAATCACAGTCTg	CCATATGG	cacaggcca--cctctacagga...232...cttaatgttgat	taagatgt
O. Cun	cagaacag	gtcagttgaaga...323...atTTTgTgTtTtTtagataa	CTAAAtcGACAACAAATCACAGTCTg	CCATATGG	cacaggccatgcctctacag---.244...cttgatgttgat	taagatgt
C. Fam	cagaacag	gtcagtttgagt...325...atTTTgTgTtTtTtagataa	CTAAAtcGACAACAAATCACAGTCTg	CCATATGG	cacaggccatgcctctacag---.240...cttaatgttgat	taagatgt
F. Cat	cagaacag	gtcagtttgagt...324...atTTTgTgTtTtTtagataa	CTAAAtcGACAACAAATCACAGTCTg	CCATATGG	cacaggccatgcctctacag---.238...cttaatgttgat	taagatgt
B. Tau	cagaacag	gtcagtttgagt...328...atTTTgTgTtTtTtagataa	CTAAAtcGACAACAAATCACAGTCTg	CCATATGG	cacaggccatgcctctacag---.233...attaagattgat	taagatgt
E. Cab	cagaacag	gtcagtttgagt...326...atTTTgTgTtTtTtagataa	CTAAAtcGACAACAAATCACAGTCTg	CCATATGG	cacaggccatgcctctacag---.240...cttaatgttgat	taagatgt
O. Avi	cagaacag	gtcagtttgagt...328...atTTTgTgTtTtTtagataa	CTAAAtcGACAACAAATCACAGTCTg	CCATATGG	cacaggccatgcctctacag---.229...gtaagattgac	taagatgt
L. Afr	cagaacag	gtcagtttaagt...325...atTTTgTgTtTtTtagataa	CTAAAtcGACAACAAATCACAGTCTg	CCATATGG	cacaggccatgcctctacag---.231...cttaatgttgat	taagatgt
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id=679179 gene=ENSG00000165119 name=HNRNPK segment=chr9.86584411.86585076_-1 type=AN VIEW

Figure 127:



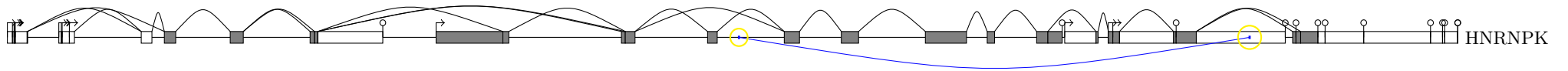
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R. Mac	gcttaaat	gtatgtcatagtgc	TTGAac	CCCAC	TGAAG	AGTATGGAGC	ctggcccataggatcgatta...430...ctccctccacag	taccaaca
P. Tro	gcttaaat	gtatgtcatagtgc	TTGAac	CCCAC	TGAAG	AGTATGGAGC	ctggcccataggatcgatta...430...ctccctccacag	taccaaca
P. Abe	gcttaaat	gtatgtcatagtgc	TTGAac	CCCAC	TGAAG	AGTATGGAGC	ctggcccataggatcgatta...430...ctccctccacag	taccaaca
C. Jac	gcttaaat	gtatgtcatagtgc	TTGAac	CCCAC	TGAAG	AGTATGGAGC	ctggcccataggatcgatta...430...ctccctccacag	taccaaca
M. Mus	gcttaaat	gtatgtcatagtgc	TTGAac	CCCAC	TGAAG	AGTATGGAGC	ctggcccataggatcgatt...428...ccccctctacag	taccaaca
R. Nor	gcttaaat	gtatgtcatagtgc	TTGAac	CCCAC	TGAAG	AGTATGGAGC	ctggcccataggatcgatt...425...tccccctacag	taccagca
C. Por	gcttaaat	gtatgtcatagtgc	TTGAac	CCCAC	TGAAG	AGTATGGAGC	ctggcccataggatgatt...427...ctccctccacag	taccaaca
O. Cun	gcttaaat	gtatgtcatagtgc	TTGAac	CCCAC	TGAAG	AGTATGGAGC	ctggcccataggatcaatt...433...ctcctctacag	taccaaca
C. Fam	gcttaaat	gtatgtcatagtgc	TTGAac	CCCAC	TGAAG	AGTATGGAGC	ctggcccataggatcaatt...427...ctccctctgcag	taccaaca
F. Cat	gcttaaat	gtatgtcatagtgc	TTGAac	CCCAC	TGAAG	AGTATGGAGC	ctggcccataggatcaatt...427...ctccctctgcag	taccaaca
B. Tau	gcttaaat	gtatgtcatagtgc	TTGAac	CCCAC	TGAAG	AGTATGGAGC	ctggcccataggatcgatt...424...ctccctccacag	taccaaca
E. Cab	gcttaaat	gtatgtcatagtgc	TTGAac	CCCAC	TGAAG	AGTATGGAGC	ctggcccataggatcaatt...428...ctcctctgcag	taccaaca
O. Avi	gcttaaat	gtatgtcatagtgc	TTGAac	CCCAC	TGAAG	AGTATGGAGC	ctggcccataggatcgatt...424...ctccctccacag	taccaaca
L. Afr	gcttaaat	gtatgtcatagtgc	TTGAac	CCCAC	TGAAG	AGTATGGAGC	ctggcccataggatcgatt...424...ctccctccag	taccaaca
		*****	*****	*****	*****	*****	*****	*****

id=679158 gene=ENSG00000165119 name=HNRNPK segment=chr9.86588315.86588816_-1 type=IN

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R. Mac	gcttaaat	gtatgtcatagt...	118...	tacaactcactgttgaccct	GCTCCATGCTg	CAGTGGGaa	TTAA	-ctacatttgcaaagtgcttt...296...ctccctccacag	taccaaca
P. Tro	gcttaaat	gtatgtcatagt...	118...	tacaactcactgttgaccct	GCTCCATGCTg	CAGTGGGaa	TTAA	-ctacatttgcaaagtgcttt...296...ctccctccacag	taccaaca
P. Abe	gcttaaat	gtatgtcatagt...	118...	tacaactcactgttgaccct	GCTCCATGCTg	CAGTGGGaa	TTAA	-ctacatttgcaaagtgcttt...296...ctccctccacag	taccaaca
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M. Mus	gcttaaat	gtatgtcatagt...	118...	tacaactcactgttgaccct	GCTCCATGCTg	CAGTGGGaa	TTAA	-ctacatttgcaaagtgcttt...294...ccccctctacag	taccaaca
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C. Por	gcttaaat	gtatgtcatagt...	119...	tacaactcactgttgaccct	GCTCCATGCTg	CAGTGGGaa	TTAA	-ctacatttgcaaagtgcttt...292...ctccctccacag	taccaaca
O. Cun	gcttaaat	gtatgtcatagt...	116...	tacaactcactgttgaccct	GCTCCATGCTg	CAGTGGGaa	TTAA	-ctacatttgcaaagtgcttt...301...ctcctctacag	taccaaca
C. Fam	gcttaaat	gtatgtcatagt...	115...	tacaactcactgttgaccct	GCTCCATGCTg	CAGTGGGaa	TTAA	-ctacatttgcaaagtgcttt...296...ctccctctgcag	taccaaca
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L. Afr	gcttaaat	gtatgtcatagt...	115...	tacaactcactgttgaccct	GCTCCATGCTg	CAGTGGGaa	TTAA	-ctacatttgcaaagtgcttt...293...ctccctccag	taccaaca
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id=679158 gene=ENSG00000165119 name=HNRNPK segment=chr9.86588315.86588816_-1 type=IN VIEW

Figure 128:



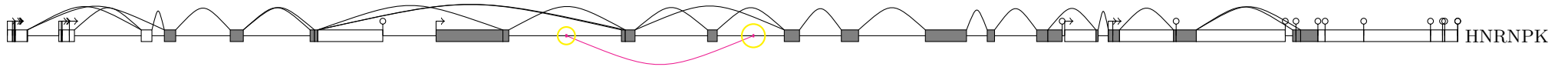
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C. Jac	gcttaaat	gtatgtcatagt...115...	tcttacaactcactgttgac	CCTGct	CCATGct	GCAGt	gggaatt-aactacattgc...	306...	ctccctccacag	taccaaca
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O. Cun	gcttaaat	gtatgtcatagt...113...	tcttacaactcactgttgac	CCTGct	CCATGct	GCAGt	gggaattaaactacattg-	311...	ctcctctacag	taccaaca
C. Fam	gcttaaat	gtatgtcatagt...112...	tcttacaactcactgttgac	CCTGct	CCATGct	GCAGt	gggaatt-aactacattgc...	306...	ctccctccacag	taccaaca
F. Cat	gcttaaat	gtatgtcatagt...115...	tcttacaactcactgttgac	CCTGct	CCATGct	GCAGt	gggaatt-aactacattgc...	303...	ctccctccacag	taccaaca
B. Tau	gcttaaat	gtatgtcatagt...115...	tcttacaactcactgttgac	CCTGct	CCATGct	GCAGt	gggaatt-aactacattgc...	300...	ctccctccacag	taccaaca
E. Cab	gcttaaat	gtatgtcatagt...115...	tcttacaactcactgttgac	CCTGct	CCATGct	GCAGt	gggaatt-aactacattgc...	304...	ctcctctccag	taccaaca
O. Avi	gcttaaat	gtatgtcatagt...115...	tcttacaactcactgttgac	CCTGct	CCATGct	GCAGt	gggaatt-aactacattgc...	300...	ctccctccacag	taccaaca
L. Afr	gcttaaat	gtatgtcatagt...112...	tcttacaactcactgttgac	CCTGct	CCATGct	GCAGt	gggaatt-aactacattgc...	303...	ctccctccacag	taccaaca
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id=679158 gene=ENSG00000165119 name=HNRNPK segment=chr9.86588315.86588816_-1 type=IN

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P. Tro	cagaacag	gtcagtttaagt...350...	aatcgacaacaaatcacagt	CTGCca	TATGGca	CAGGc	catgcctctacaggacaaa--...	234...	cttgatggtgat	taagatgt
P. Abe	cagaacag	gtcagtttaagt...352...	aatcgacaacaaatcacagt	CTGCca	TATGGca	CAGGc	catgcctctacaggacaaa--...	234...	cttgatggtgat	taagatgt
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R. Nor	cagaacag	gtcagttgatgc...354...	agacgacaacaaatcacagt	CTGCca	TATGGca	CAGGc	cca--cctctacaggacagaca...	226...	cttaatggtgat	taagatgt
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C. Fam	cagaacag	gtcagtttgagt...348...	aatcgacaacaaatcacagt	CTGCca	TATGGca	CAGGc	catgcctctacaggacaaa--...	234...	cttaatggtgat	taagatgt
F. Cat	cagaacag	gtcagtttgagt...347...	aatcgacaacaaatcacagt	CTGCca	TATGGca	CAGGc	catgcctctacaggacaaa--...	232...	cttaatggtgat	taagatgt
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E. Cab	cagaacag	gtaagtttaggt...348...	aatcgacaacaaatcacagt	CTGCca	TATGGca	CAGGc	catgcctctacaggacaaa--...	234...	cttaatggtgat	taagatgt
O. Avi	cagaacag	gtcagtttggtt...351...	aatcgacaacaaatcacagt	CTGCca	TATGGca	CAGGc	catgcctctacaggacaaa--...	223...	gtaagattgat	taagatgt
L. Afr	cagaacag	gtcagtttaagt...348...	aattgacaacaaatcacagt	CTGCca	TATGGca	CAGGc	catgcctctacaggacaaa--...	225...	cttaatggtgat	tcagatgt
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id=679179 gene=ENSG00000165119 name=HNRNPK segment=chr9.86584411.86585076_-1 type=AN VIEW

Figure 129:



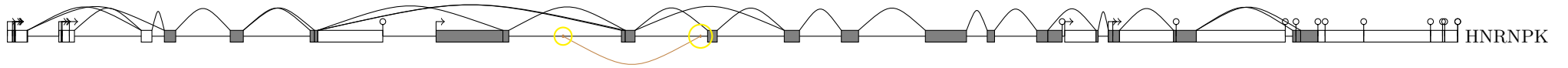
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P. Tro	cccgagcg	gtagtgtccaac...383...	ttgcatttgatttgtttc	-----	TTGCagAGCCca	-----	TTAGTG	-----	atctaatttctaactggat	---...378...	ccgcctttttg	tactatct
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M. Mus	cccgagcg	gtagtgtccaac...393...	-----	tgttttcttcagagcccat	TAAGTAGTcTAATTCTa	ACTGGTAT	-----	tcataaccttactccagata	-----...343...	cactttttttg	tattctgt	
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O. Cun	cccgagcg	gtagtgtccaac...382...	ttgcatttgatttgtttc	-----	TTGCagAGCCca	-----	TTAGTG	-----	atctgatttctaactggat	---...381...	ccacttttttg	tactatct
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O. Avi	cccgagcg	gtagtgtccaac...384...	ttgcatttgatttgtttc	-----	TTGCagAGCCca	-----	TTAGTG	-----	atctaatttctaactggat	---...379...	ccacctttttg	tactatct
L. Afr	cccgagcg	gtagtgtccaac...384...	ttgcatttgatttgtttc	-----	TTGCagAGCCca	-----	TTAGTG	-----	atctaatttctaactggat	---...382...	ccacctttttg	tactatct
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id=679153 gene=ENSG00000165119 name=HNRNPK segment=chr9.86589534.86590376_-1 type=IN

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R. Mac	gcttaaat	gtagtgcatagt...223...	-----	atthttgtgtaacagcgaca	TGCTAAatGGCTGCAG	-----	-----	-----	tgtgggatggtggtgcagg	...199...	ctccctccacag	taccaaca
P. Tro	gcttaaat	gtagtgcatagt...223...	-----	atthttgtgtaacagcgaca	TGCTAAatGGCTGCAG	-----	-----	-----	tgtgggatggtggtgcagg	...199...	ctccctccacag	taccaaca
P. Abe	gcttaaat	gtagtgcatagt...223...	-----	atthttgtgtaacagcgaca	TGCTAAatGGCTGCAG	-----	-----	-----	tgtgggatggtggtgcagg	...199...	ctccctccacag	taccaaca
C. Jac	gcttaaat	gtagtgcatagt...223...	-----	atthttgtgtaacagcgaca	TGCTAAatGGCTGCAG	-----	-----	-----	tgtgggatggtggtgcagg	...199...	ctccctccacag	taccaaca
M. Mus	gcttaaat	gtagtgcatagt...123...	ctcactgttgaccctgctcc	-----	ATGCTgCAGTGGGAATTAACTA	caTTG	-----	caaagtgctttgcagtcatt	-----...285...	ccccctctacag	taccaaca	
R. Nor	gcttaaat	gtagtgcatagt...123...	ctcactgttgaccctgctcc	-----	ATGCTgCAGTGGGAATTAACTA	caTTG	-----	caaagtgctttgcagtcatt	-----...282...	tccccctacag	taccagca	
C. Por	gcttaaat	gtagtgcatagt...211...	aatgttaataatthttgtggt	-----	AACAGcGACATGctAAATG	-----	-----	gctgcagtggtggtggtg	-----...205...	ctccctccacag	taccaaca	
O. Cun	gcttaaat	gtagtgcatagt...224...	-----	atthttgtgtaacagcgaca	TGCTAAatGGCTGCAG	-----	-----	-----	tgtgggatggtggtgcagg	...201...	ctcctctacag	taccaaca
C. Fam	gcttaaat	gtagtgcatagt...220...	-----	atthttgtgtaacagcgaca	TGCTAAatGGCTGCAG	-----	-----	-----	tgtgggatggtggtgcagg	...199...	ctccctctgcag	taccaaca
F. Cat	gcttaaat	gtagtgcatagt...223...	-----	atthttgtgtaacagcgaca	TGCTAAatGGCTGCAG	-----	-----	-----	tgtgggatggtggtgcagg	...196...	ctccctctgcag	taccaaca
B. Tau	gcttaaat	gtagtgcatagt...223...	-----	atthttgtgtaacagcgaca	TGCTAAatGGCTGCAG	-----	-----	-----	tgtgggatggtggtgcagg	...193...	ctccctccacag	taccaaca
E. Cab	gcttaaat	gtagtgcatagt...223...	-----	atthttgtgtaacagcgaca	TGCTAAatGGCTGCAG	-----	-----	-----	tgtgggatggtggtgcagg	...197...	ctcctctgcag	taccaaca
O. Avi	gcttaaat	gtagtgcatagt...223...	-----	atthttgtgtaacagcgaca	TGCTAAatGGCTGCAG	-----	-----	-----	tgtgggatggtggtgcagg	...193...	ctccctccacag	taccaaca
L. Afr	gcttaaat	gtagtgcatagt...220...	-----	atthttgtgtaacagcgaca	TGCTAAatGGCTGCAG	-----	-----	-----	tgtgggatggtggtgcagg	...196...	ctccctccag	taccaaca
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id=679158 gene=ENSG00000165119 name=HNRNPK segment=chr9.86588315.86588816_-1 type=IN VIEW

Figure 130:



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P. Tro	cccgagcg	gtagtccaac...353...-----acttctcatttgtgtgtct- TGTTTGTC ttGCATttGTATTtgttttctgcagagcccat...403...ccgccttttttg	tactatct
P. Abe	cccgagcg	gtagtccaac...353...-----acttctcatttgtgtgtct- TGTTTGTC ttGCATttGTATTtgttttctgcagagcccat...403...ccgccttttttg	tactatct
M. Mus	cccgagcg	gtagtccaac...350...-----acttctcatttgtactgtct- TGTTTGTC ttGCATttGTATTtgttttctgcagagcccat...389...cactttttttg	tattctgt
R. Nor	cccgagcg	gtagtccaac...355...-----acttctcatttgtactgtct- TGTTTGTC ttGCATttGTATTtgttttctgcagagcccat...384...tccaactttttg	tattatgt
C. Por	cccgagcg	gtagtccaac...353...-----acttctcatttgtattgtct- TGTTTGTC ttGCATttGTATTtgttttctgcagagcccat...403...ccaccttttttg	tactatct
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B. Tau	cccgagcg	gtagtccaac...359...-----catttgtgtgtcctt TGTTTGTC ttGCATttGTATTtgttttctgcagagcccat...405...cactttttttg	tactatct
E. Cab	cccgagcg	gtagtccaac...353...-----acttctcatttgtgtgtct- TGTTTGTC ttGCATttGTATTtgttttctgcagagcccat...408...ccaccttttttg	tactatct
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L. Afr	cccgagcg	gtagtccaac...354...-----acttctcatttgtgtgtct- TGTTTGTC ttGCATttGTATTtgttttctgcagagcccat...407...ccaccttttttg	tactatct

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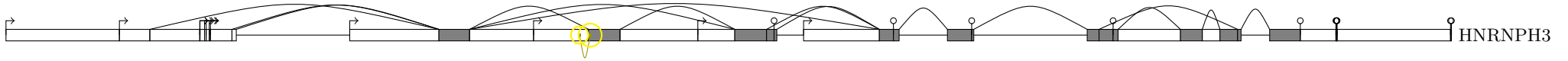
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id=679156 gene=ENSG00000165119 name=HNRNPK segment=chr9.86588889.86589431_-1 type=IN VIEW

Figure 131: CS=9.8



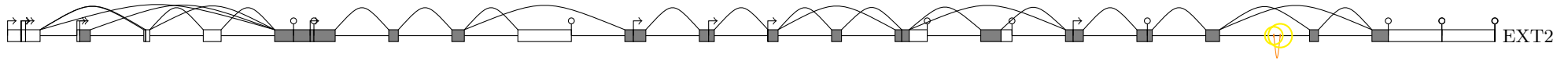
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R. Mac	tttttcat	gtaatataggtg...154...atttgattcagatgggaatg	TTTCAGCCTTTAAC	actgttccccttgatggggttatttgccttgggtaaaag	ggttggaa
P. Tro	tttttcat	gtaatataggtg...156...atttgattcagatgggaatg	TTTCAGCCTTTAAC	actgttccccttgatggggttatttgccttgggtaaaag	ggttggaa
P. Abe	tttttcat	gtaatataggtg...158...atttgattcagatgggaatg	TTTCAGCCTTTAAC	actgttccccttgatggggttatttgccttgggtaaaag	ggttggaa
C. Jac	tttttcat	gtaatataggtg...152...atttgattcagatgggaatg	TTTCAGCCTTTAAC	actgttccccttgatggggttatttgccttgggtaaaag	ggttggaa
M. Mus	tttttcac	atagtgggcctt...133...aattgattcagatgggaatg	TTTCAGCCTTTAAC	actgttccccttgatgggg-tatttgccttgggtaaaag	ggttggaa
R. Nor	tttttcat	gtagtgggcctt...130...atttgattcagatgggaatg	TTTCAGCCTTTAAC	actgttccccttgatgggg-tatttgccttgggtaaaag	ggttggaa
C. Por	tttttcat	gtactataggtg...153...atagattcagatgggaatg	TTTCAGCCTTTAAC	actgttccccttgatggggttatttgccttgggtaaaag	ggttggaa
O. Cun	tttttcat	gtaatttaggtg...144...atttgattcagatgggaatg	TTTCAGCCTTTAAC	actgttccccttgatggggttatttgccttgggtaaaag	ggttggaa
C. Fam	ttttaaat	gtaacataggtg...152...atttgattcagatgggaatg	TTTCAGCCTTTAAC	actgttccccttgatggggttatttgccttgggtaaaag	ggttggaa
F. Cat	ttttaaat	gtaatataggtg...157...atttgattcagatgggaatg	TTTCAGCCTTTAAC	actgttccccttgatggggttatttgccttgggtaaaag	ggttggaa
B. Tau	ttttccat	gtaatataggtg...158...atttgattcagatgggaatg	TTTCAGCCTTTAAC	actgttccccttgatggggttatttgccttgggtaaaag	ggttggaa
E. Cab	ttttccat	gtaatataggtg...153...atttgattcagatgggaatg	TTTCAGCCTTTAAC	actgttccccttgatggggttatttgccttgggtaaaag	ggttggaa
S. Sus	ttttccgt	gtaatataat...164...atttgattcagatgggaatg	TTTCAGCCTTTAAC	actgttccccttgatggggttatttgccttgggtaaaag	ggttggaa
O. Avi	ttttccat	gtaatatagga...156...atttgattcagatgggaatg	TTTCAGCCTTTAAC	actgttccccttgatggggttatttgccttgggtaaaag	ggttggaa
L. Afr	tttttaat	gtaatataggtg...150...atttgatacagatgggaatg	TTTCAGCCTTTAAC	actgttccccttgatggggttatttgccttgggtaaaag	ggttggaa
****	**	*	****	*****	*****

id=529746 gene=ENSG00000096746 name=HNRNPH3 segment=chr10.70097373.70097614.1 type=AN

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P. Tro	tttttcat	gtaatataggtg...203...-atggggttatttgccttgg	GTTAAAG	GTTTGGAA
P. Abe	tttttcat	gtaatataggtg...205...-atggggttatttgccttgg	GTTAAAG	GTTTGGAA
C. Jac	tttttcat	gtaatataggtg...199...-atggggttatttgccttgg	GTTAAAG	GTTTGGAA
M. Mus	tttttcac	atagtgggcctt...179...gatgggggt-atttgccttgg	GTTAAAG	GTTTGGAA
R. Nor	tttttcat	gtagtgggcctt...176...gatgggggt-atttgccttgg	GTTAAAG	GTTTGGAA
C. Por	tttttcat	gtactataggtg...200...-atggggttatttgccttgg	GTTAAAG	GTTTGGAA
O. Cun	tttttcat	gtaatttaggtg...191...-atggggttatttgccttgg	GTTAAAG	GTTTGGAA
C. Fam	ttttaaat	gtaacataggtg...199...-atggggttatttgccttgg	GTTAAAG	GTTTGGAA
F. Cat	ttttaaat	gtaatataggtg...204...-atggggttatttgccttgg	GTTAAAG	GTTTGGAA
B. Tau	ttttccat	gtaatataggtg...205...-atggggttatttgccttgg	GTTAAAG	GTTTGGAA
E. Cab	ttttccat	gtaatataggtg...200...-atggggttatttgccttgg	GTTAAAG	GTTTGGAA
S. Sus	ttttccgt	gtaatataat...211...-atggggttatttgccttgg	GTTAAAG	GTTTGGAA
O. Avi	ttttccat	gtaatatagga...203...-atggggttatttgccttgg	GTTAAAG	GTTTGGAA
L. Afr	tttttaat	gtaatataggtg...197...-atggggttatttgccttgg	GTTAAAG	GTTTGGAA
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id=529746 gene=ENSG00000096746 name=HNRNPH3 segment=chr10.70097373.70097614.1 type=AN VIEW

Figure 132:



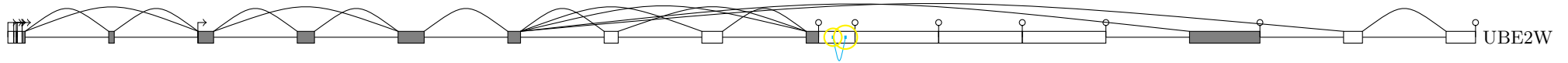
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C. Por	tcatcaag	gtaagaggctct...1030...	tacgg-tgaaagttatgggaa	GCTGTA	TTTCa	TCGC	ccttatggctgcaagaacaa...	297...	ctcctctggcag	gtgacccc
O. Cun	tcatcaag	gtaaggctctgc...1379...	tacgg-tgaaagttatgggaa	GCTGTA	TTTCa	TCGC	ccttatggctgcaagaacaa...	307...	ctcttctgtag	gtaacccc
C. Fam	tcatcaag	gtaagacatcct...1974...	tacgg-tgaaagttatgggaa	GCTGTA	TTTCa	TCGC	ccttatggctgcaagaacaa...	350...	ttcctctggcag	gtaacacc
B. Tau	tcatcaag	gtaggaggcatc...1297...	tacgg-tgaaagttatgggaa	GCTGTA	TTTCa	TCGC	ccttatggctgcaagaacaa...	301...	ctcctctggcag	gtaacacc
E. Cab	tcatcaag	gtaggaggctc...1347...	tacgg-tgaaagttatgggaa	GCTGTA	TTTCa	TCGC	ccttatggctgcaagaacaa...	321...	ctcctctggcag	gtcacgcc
S. Sus	tcatcaag	gtaggaggcatc...1615...	tacgg-tgaaagttatgggaa	GCTGTA	TTTCa	TCGC	ccttatggctgcaagaacaa...	337...	ctcccctggcag	gtaacacc
O. Avi	tcatcaag	gtaggaggcatc...1292...	tatgg-tgaaagttatgggaa	GCTGTA	TTTCa	TCGC	ccttatggctgcaagaacaa...	329...	ctcctctggcag	gtaacacc
L. Afr	tcatcaag	gtaggagatgtc...1764...	tacgg-tgaaagttatgggaa	GCTGTA	TTTCa	TCGC	ccttatggctgcaagaacaa...	316...	ctcctctggcag	gtaacccc
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id=529948 gene=ENSG00000151348 name=EXT2 segment=chr11.44255794.44257842.1 type=IN

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R. Mac	ttatcaag	gtaggaggctct...1743...	tttatacaaggaccttggca	GTGAGAAAACAGT	cattaacaggaattaagga-	245...	ctcctctggcag	gtaacccc
P. Tro	ttatcaag	gtaggaggctct...1732...	tttatacaaggaccttggca	GTGAGAAAACAGT	cattaacaggaattaagga-	241...	ctcctctggcag	gtaacccc
P. Abe	ttatcaag	gtaggaggctct...1702...	tttatacaaggaccttggca	GTGAGAAAACAGT	cattaacaggaattaagga-	235...	ctcctctggcag	gtaacccc
C. Jac	ttatcaag	gtaggaggctct...1722...	tttatacaaggaccttggca	GTGAGAAAACAGT	cattaacaggaattaagga-	248...	tccctctggcag	gtaacccc
M. Mus	tcatcaag	gtaagagcccat...879...	tttatacaaggaccttggca	GTGAGAAAACAGT	cattaacaggaattaaggag-	249...	ttcctcatcag	gtaacccc
R. Nor	tcatcaag	gtaagagcccat...940...	tttatacaaggaccttggca	GTGAGAAAACAGT	cattaacaggaattaaggag-	233...	ttcctcatcag	gtaacccc
C. Por	tcatcaag	gtaagaggctct...1091...	tttatacaaggaccttggca	GTGAGAAAACAGT	cattaacaggaattaagga-	238...	ctcctctggcag	gtgacccc
O. Cun	tcatcaag	gtaaggctctgc...1440...	tttatacaaggaccttggca	GTGAGAAAACAGT	cattaacaggaattaagga-	248...	ctcttctgtag	gtaacccc
C. Fam	tcatcaag	gtaagacatcct...2035...	tttatacaaggaccttggca	GTGAGAAAACAGT	cattaacaggaattaagga-	291...	ttcctctggcag	gtaacacc
B. Tau	tcatcaag	gtaggaggcatc...1358...	tttatacaaggaccttggca	GTGAGAAAACAGT	cattaacaggaattaagga-	242...	ctcctctggcag	gtaacacc
E. Cab	tcatcaag	gtaggaggctc...1408...	tttatacaaggaccttggca	GTGAGAAAACAGT	cattaacaggaattaagga-	262...	ctcctctggcag	gtcacgcc
S. Sus	tcatcaag	gtaggaggcatc...1676...	tttatacaaggaccttggca	GTGAGAAAACAGT	cattaacaggaattaagga-	278...	ctcccctggcag	gtaacacc
O. Avi	tcatcaag	gtaggaggcatc...1353...	tttatacaaggaccttggca	GTGAGAAAACAGT	cattaacaggaattaagga-	270...	ctcctctggcag	gtaacacc
L. Afr	tcatcaag	gtaggagatgtc...1825...	tttatacaaggaccttggca	GTGAGAAAACAGT	cattaacaggaattaaggc-	257...	ctcctctggcag	gtaacccc
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id=529948 gene=ENSG00000151348 name=EXT2 segment=chr11.44255794.44257842.1 type=IN VIEW

Figure 133: CS=9



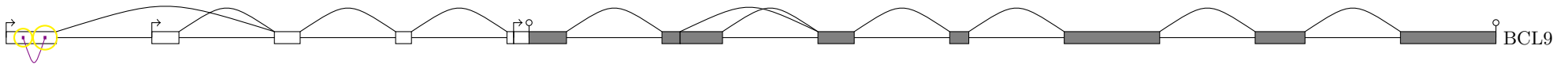
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R. Mac	actttgat	cattcagtccttt...27...ctataggcaatgaagactac	TCCTtt	TACTGCATTtt	TACTTGTGTG	cattctgggcgcatggtgat...99...ttttttaagcct	ttggaaaa
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P. Abe	actttgat	cattcagtccttt...27...ctataggcaatgaagactac	TCCTtt	TACTGCATTtt	TACTcGTGTG	cattctgggcgcatggtgat...99...ttttttaagcct	ttggaaaa
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R. Nor	actttgat	cattcagtccttt...27...ctataggcaatgaagactac	TCCTtt	TACTGCATTtt	TACTcGTGTG	cattctgggcgcatggtgat...101...ttttttaagcct	ttggaaaa
C. Por	actttgat	cattcagtccttt...27...ctataggcaatgaagactac	TCCTtt	TACTGCATTtt	TACTTGTGTG	cattctgggcgcatggtgat...95...ttttttaagcct	ttggaaaa
C. Fam	actttgat	cattcagtccttt...27...ctataggcaatgaagactac	TCCTtt	TACTGCATTtt	TACTcGTGTG	cattctgggcgcatggtgat...98...ttttttaagcct	ttggaaaa
F. Cat	actttgat	cattcagtccttt...27...ctataggcaatgaagactac	TCCTtt	TACTGCATTtt	TACTcGTGTG	cattctgggcgcatggtgat...99...ttttttaagcct	ttggaaaa
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S. Sus	actttgat	cattcagtccttt...27...ctataggcaatgaagactac	TCCTtt	TACTGCATTtt	TACTcGTGTG	cattctgggcgcatggtgat...98...ttttttaagcct	ttgaaaaa
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id=571269 gene=ENSG0000104343 name=UBE2W segment=chr8_74706059_74706276_-1 type=AN

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P. Tro	actttgat	cattcagtccttt...114...-actgacatgctttt-attagt	CATACAGTA	AATGC	AGGTGtc	AGGAA	atgtcaaatataaattcca--ttttttat	tttttttaagcct	ttggaaaa	
P. Abe	actttgat	cattcagtccttt...114...-actgacatgctttt-attagt	CATACAGTA	AATGC	AGGTGtc	AGGAA	atgtcaaatataaattcca--ttttttat	tttttttaagcct	ttggaaaa	
C. Jac	actttgat	cattcagtccttt...114...-actgacatgctttt-attagt	CATACAGTA	AATGC	AGGTGtc	AGGAA	acgtcaaatataaattcca--ttttttat	tttttttaagcct	ttggaaaa	
M. Mus	actttgat	cattcagtccttt...114...-accgacatgctttt-attagt	CATACAGTA	AATGC	AGGTGtc	AGGAA	atgtcaaatataaattcca--ttttttat	tttttttaagcct	ttggaaaa	
R. Nor	actttgat	cattcagtccttt...114...-actgacatgctttt-attagt	CATACAGTA	AATGC	AGGTGtc	AGGAA	atgtcaaatataaattcca--ttttttat	tttttttaagcct	ttggaaaa	
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F. Cat	actttgat	cattcagtccttt...114...-actgacatgctttt-attagt	CATACAGTA	AATGC	AGGTGtc	AGGAA	atgtc-aaatataaattcca--ttttttat	tttttttaagcct	ttggaaaa	
B. Tau	actttgat	cattcagtccttt...114...-actgacatgctttt-attagt	CATACAGTA	AATGC	AGGTGtc	AGGAA	atgtcaaatataaattcca--ttttttat	tttttttaagcct	ttgaaaaa	
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S. Sus	actttgat	cattcagtccttt...113...aactgacatgc-ttt-attagt	CATACAGTA	AATGC	AGGTGtc	AGGAA	atgtcaaatataaattcca--ttttttat	tttttttaagcct	ttggaaaa	
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id=571269 gene=ENSG0000104343 name=UBE2W segment=chr8_74706059_74706276_-1 type=AN VIEW

Figure 134:



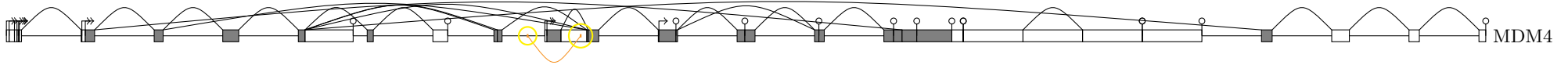
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id=113433 gene=ENSG00000116128 name=BCL9 segment=chr1.147013182_147013444_1 type=E5

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R. Mac	gagacaag	cttccatgtgtg...156...gccagggttgaggaaaagGGTCTTTTTgtCTTCATTCaCTTTCcccctcagtttctgaaatgattctccagaatttctcctcataaaaaag	gtaagagc
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C. Jac	gagacaag	cttccatgtgtg...156...gccagggttgaggaaaagGGTCTTTTTgtCTTCATTCaCTTTCcccctcagtttctgaaatgattctccagaatttctcctcataaaaaag	gtaagagc
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C. Por	gagacaag	cttccatgtgtg...156...gccagggttgaggaaaagGGTCTTTTTgtCTTCATTCaCTTTCcccctcagtttctgaaatgattctccagaatttctcctcataaaaaag	gtaagagc
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S. Sus	gagacaag	cttccatgtgtg...156...gccagggttgaggaaaagGGTCTTTTTgtCTTCATTCaCTTTCcccctcagtttctgaaatgattctccagaatttctcctcataaaaaag	gtaagagc
O. Avi	gagacaag	cttccatgtgtg...156...gccagggttgaggaaaagGGTCTTTTTgtCTTCATTCaCTTTCcccctcagtttctgaaatgattctccagaatttctcctcataaaaaag	gtaagagc
L. Afr	gagacaag	cttccatgtgtg...156...gccagggttgaggaaaagGGTCTTTTTgtCTTCATTCaCTTTCcccctcagtttctgaaatgattctccagaatttctcctcataaaaaag	gtaagcgc
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id=113433 gene=ENSG00000116128 name=BCL9 segment=chr1.147013182_147013444_1 type=E5 VIEW

Figure 136:



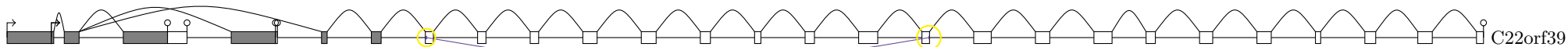
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R.Mac	aactgaag	gtaaaatcacca...167...	-cagtctctgaacctttcttt	GGGATGTAGCA	TTCTG	-----	atcttcagttcttccagttg	----	...111...	ttcccaaacct	ggggaaac
P.Tro	aactgaag	gtaaaatcacca...167...	-cagtctctgaacctttcttt	GGGATGTAGCA	TTCTG	-----	atcttcagttcttccagttg	----	...111...	ttcccaaacct	ggggaaac
P.Abe	aactgaag	gtaaaatcacca...167...	-cagtctctgaacctttcttt	GGGATGTAGCA	TTCTG	-----	atcttcagttcttccagttg	----	...111...	ttcccaaacct	gaggaaac
C.Jac	aactgaag	gtaaaatcacca...167...	-cagtctctgaacctttcttt	GGGATGTAGCA	TTCTG	-----	atcttcagttcttccagttg	----	...113...	ttcccaaat	ggggaaat
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R.Nor	gactgaag	gtaaaatcacca...167...	-cagtctctgaatgtgtcttt	GGGATGTAGCA	TTCTgATTTT	-----	cactccttccagtttctctc	...	176...	tgccctcaaatgt	agggaaac
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C.Fam	aactgaag	gtaaaatcacca...167...	-cagtctctgaatctttcttt	GGGATGTAGCA	TTCTG	-----	atcttcagttcttccagttg	----	...134...	caaacgagact	gggaaac
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P.Tro	gtgcagag	gttttttttccc...118...	----cactaac---	tggtgagccagaa	-----	TGGAAc	TGCTACATCCC	ctggctcagttatttctactgactgatg	---	gacacctttccc	--	ttctttcag	caaagtgc
P.Abe	gtgcagag	gttttttttccc...117...	----cactaac---	tggtgagccagaa	-----	TGGAAc	TGCTACATCCC	ctggctcagttatttctactgactgatg	---	gacacctttccc	--	ttctttcag	caaagtgc
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C.Fam	gtgcagag	atttttttccc...118...	----cagtaac---	tggtgagccagaa	-----	TGGAAc	TGCTACATCCC	ctggctcagtcatttctgtgactgatg	---	gacacctttccc	----	ttcag	caatgac
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S.Sus	ttgtgaa	atgtttttccc...89...	----cactaac---	tggtgagccagaa	-----	TGGAAc	TGCTACATCCC	ctggctcagtcatttctgtgactgatg	---	gacacctttccc	----	ttcag	caatgac
L.Afr	gtgcagag	ataattttctc...100...	----taaccggtgtgtgacgc	TAAGTGGtGAGC	AGGATGGAAc	TGCTACATCCC	ctggctcagtcagtcactgata	---	gacacctttccc	--	ttcag	caatgac	
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id=326083 gene=ENSG00000198625 name=MDM4 segment=chr1_204507120_204507336_1 type=AN VIEW

Figure 137: CS=4.2



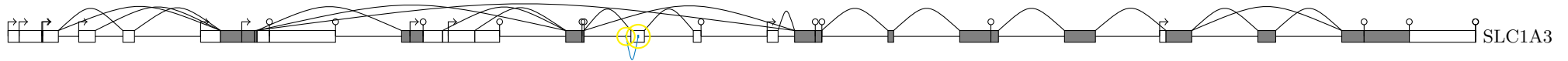
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P.Tro	cttc	CCAG	CaTGTGTGaaCTGT	gtgcggtggtcaaacagtgg...45...gaagcgggctac	gtaagcat
P.Abe	cttc	CCAG	CaTGTGTGaaCTGT	gtgcggtggtcaaacagtgg...45...gaagcgggctac	gtaagcat
C.Jac	cttc	CCAG	CaTGTGTGaaCTGT	gtgcggtggtcaaacagtgg...45...gaagcgggctac	gtaagcat
M.Mus	cttc	CCAG	CaTGTGTGaaCTGT	gtgcggtggtcaaacagtgg...45...gaagcgggctac	gtaagcat
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C.Por	cttc	CCAG	CaTGTGTGaaCTGT	gtgcggtggtcaaacagtgg...45...gaagcgggctac	gtaagcat
O.Cun	cttc	CCAG	CaTGTGTGaaCTGT	gtgcggtggtcaaacagtgg...45...gaagcgggctac	gtaagcat
C.Fam	cttc	CCAG	CaTGTGTGaaCTGT	gtgcggtggtcaaacagtgg...45...gaagcgggctac	gtaagcat
F.Cat	cttc	CCAG	CaTGTGTGaaCTGT	gtgcggtggtcaaacagtgg...45...gaaacgggctac	gtaagcat
E.Cab	cttc	CCAG	CaTGTGTGaaCTGT	gtgcggtggtcaaacagtgg...45...gaaacgggctac	gtaagcat
S.Sus	cttc	CCAG	CaTGTGTGaaCTGT	gtgcggtggtcaaacagtgg...45...gaagcgggctac	gtaagcat
L.Afr	cttc	CCAG	CaTGTGTGaaCTGT	gtgcggtggtcaaacagtgg...45...gaagcgggctac	gtaagcat
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id=489325 gene=ENSG00000242259 name=C22orf39 segment=chr22.19394707.19394797_-1 type=E3

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P.Tro	tttgccag	aatcttttgaag...34...gaagaatcacgcctctctgc	ATAGCACAGCTGG	acactgg	gtactggt
P.Abe	tttgccag	aatcttttgaag...34...gaagaatcacgcctctctgc	ATAGCACAGCTGG	acactgg	gtactggt
C.Jac	tttgccag	aatcttttgaag...34...gaagaatcacacctctctgc	ATAGCACAGCTGG	acactgg	gtactggt
M.Mus	tttgccag	aatcttttgaag...34...ggagaatcacgcctcttgc	ATAGCACAGCTGG	acactgg	gtactcac
R.Nor	tttgccag	aatcttttgaag...34...ggagaatcacgcctcttgc	ATAGCACAGCTGG	acactgg	gtactcgt
C.Por	tttgccag	aatcttttgaag...34...gaagaatcacacctctctgc	ATAGCACAGCTGG	acactgg	gtactcat
O.Cun	tttgccag	aatcttctgaag...34...gaagaatcacgcctctctgc	ATAGCACAGCTGG	acactgg	gtactcat
C.Fam	tttaccag	aatcttttgaag...34...gaagaatcacacctctctgc	ATAGCACAGCTGG	acaccgg	gtacttgt
F.Cat	tttgccag	aatcttttgaag...34...gaagaatcacacctctctgc	ATAGCACAGCTGG	acaccgg	gtacttat
E.Cab	tttgccag	aatcttttgaag...34...ggagaatcacacctctctgc	ATAGCACAGCTGG	acaccgg	gtactcgt
S.Sus	cctgccag	aatcttctaaag...34...ggagaatcacacctctctgc	ATAGCACAGCTGG	acaccgg	gtactcgt
L.Afr	cctgccag	aatcttttgaag...34...gaagaatcacgcctctctgc	ATAGCACAGCTGG	acaccgg	gtattcat
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Figure 138:



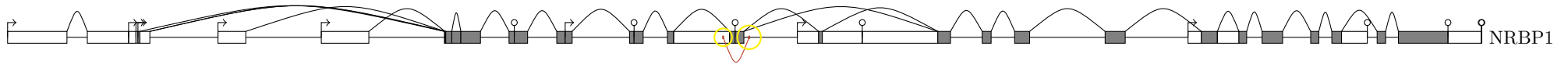
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P. Tro	gtcacag	g	taccataagcag-...272...ctctgaccacagtgatgtag	TTGAc	AACAGCGT	acaacaggctctgttttctcaccctcttatcccaccag	ataacatc
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M. Mus	gtcacag	g	taccggacacgg-...391...ctctgaccacagtgatgtag	TTGAc	AACAGCGT	acaacaggctctgttttctcaccctcttatcccaccag	ataacatc
R. Nor	gtcacag	g	taccggacacgg-...331...ctctgaccacagtgatgtag	TTGAc	AACAGCGT	acaacaggctctgttttctcaccctcttatcccaccag	ataacatc
C. Por	gtcacag	g	taccatatatgg-...273...ccctgaccgagtgatgtag	TTGAc	AACAGCGT	acaacaggctctgttttctcaccctcttatcccaccag	ataacatc
C. Fam	gtcacag	g	taccacatgcag-...259...ctctgaccacagcgatacag	TTGAc	AACAGCGT	acaacaggctctgttttctcaccctcttatcccaccag	ataacatc
F. Cat	gtcacag	g	taccatatgcag-...290...ctctgaccacagcgatag	TTGAc	AACAGCGT	acaacaggctctgttttctcaccctcttatcccaccag	ataacatc
B. Tau	gtcacag	g	taccctatgcag-...255...ctctgcccacagcgatgtag	TTGAc	AACAGCGT	acaacaggctctgttttctcaccctcttatcccaccag	ataacatc
E. Cab	gtcacag	g	taccatatgcag-...257...ctctgaccacagcgatag	TTGAc	AACAGCGT	acaacaggctctgttttctcaccctcttatcccaccag	ataacatc
S. Sus	gtcacag	g	taccctctgcag-...260...ctctgaccacagcgatgtag	TTGAc	AACAGCGT	acaacaggctctgttttctcaccctcttatcccaccag	ataacatc
L. Afr	gtcacag	g	taccacatgcag-...258...ctctgaccacagtgatgtag	TTGAc	AACAGCGT	acaacaggctctgttttctcaccctcttatcccaccag	ataacatc
*****	*	*	*	*	*	*****	*****

id=548506 gene=ENSG00000079215 name=SLC1A3 segment=chr5_36629691_36630044_1 type=IN

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R. Mac	ccaccag	ataacatctggttggacagcctattagctattgatgcaaga	ATGCt	TGTTc	TCAGa	accaccaggacttgagcgggagccttcttggagcctcatcaagag	gtaatgcc
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M. Mus	ccaccag	ataacatctggttggacagcctattagctattgatgcaaga	ATGCt	TGTTc	TCAGa	accaccaggacttgagcgggagccttcttggagcctcatcaagag	gtaatgcc
R. Nor	ccaccag	ataacatctggttggacagcctattagctattgatgcaaga	ATGCt	TGTTc	TCAGa	accaccaggacttgagcgggagccttcttggagcctcatcaagag	gtaatgcc
C. Por	ccaccag	ataacatctggttggacagcctattagctattgatgcaaga	ATGCt	TGTTc	TCAGa	accaccaggacttgagcgggagccttcttggagcctcatcaagag	gtaatgcc
C. Fam	ccaccag	ataacatctggttggacagcctattagctattgatgcaaga	ATGCt	TGTTc	TCAGa	accaccaggacttgagcgggagccttcttggagcctcatcaagag	gtaatgcc
F. Cat	ccaccag	ataacatctggttggacagcctattagctattgatgcaaga	ATGCt	TGTTc	TCAGa	accaccaggacttgagcgggagccttcttggagcctcatcaagag	gtaatgcc
B. Tau	ccaccag	ataacatctggttggacagcctattagctattgatgcaaga	ATGCt	TGTTc	TCAGa	accaccaggacttgagcgggagccttcttggagcctcatcaagag	gtaatgcc
E. Cab	ccaccag	ataacatctggttggacagcctattagctattgatgcaaga	ATGCt	TGTTc	TCAGa	accaccaggacttgagcgggagccttcttggagcctcatcaagag	gtaatgcc
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Figure 139:



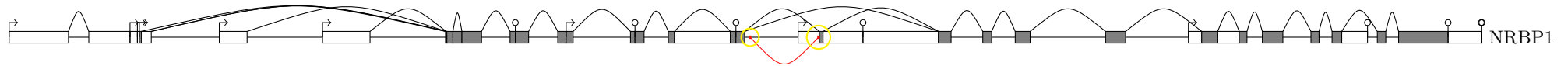
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C.Fam	gccttag	gtaagtaggatt...280...	ggcccttgctcctcttaacc	CTTGGGTTC	CCTGCC	ttAATTTC	agtggccctctaacagcccagtgccccacag	ctacctgc
F.Cat	gccttag	gtaagtaggatt...227...	ggcccttgctcctcttaacc	CTTGGGTTC	CCTGCC	ttAATTTC	agtggccctctaacagcccagtgccccacag	ctacctgc
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L.Afr	gcctaag	gtaagttgtg...279...	ggcccttgctcctcttaacc	CTTGGGTTC	CCTGCC	ttatgtgccagtggtcctctaacagcccagtgccccacag	ctacctgc	
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R.Mac	tggctctg	gtgagggga	GGGAgaGGT	ctGGCAGGGAGCC	CGGGA	aatttgggaaccatgggggt...280...	-ttgctgtgtatt	tgtgtgca
P.Tro	tggctctg	gtgagggga	GGGAgaGGT	ctGGCAGGGAGCC	CGGGA	aatttgggaaccatgggggt...282...	ttgctgtgta-t	cgtatgca
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C.Jac	tggctctg	gtgagggga	GGGAgaGGT	ctGGCAGGGAGCC	CGGGA	aatttgggaaccatgggggt...282...	-ttgctgtgtatt	tgtgtgca
M.Mus	tggctctg	gtgagggga	GGGAgaGATT	ctGGCAGGGAGCC	CGGGA	aatttgggaaccatgggggt...274...	-ttgctgtgtatt	tgtgtgca
C.Por	tggctctg	gtgagggga	GGGAgaGGT	ctGGCAGGGAGCC	CGGGA	acttgggaaccatgggggt...277...	-ttgctgtgtatc	tgtgtgca
O.Cun	tggctctg	gtgagggga	GGGAgaGGT	ctGGCAGGGAGCC	CGGGA	aatctgggaaccatgggggt...277...	-ttgctgtgtatc	tgtgtgca
C.Fam	tggctctg	gtgagggga	GGGAgaGGT	ctGGCAGGGAGCC	CGGGA	aatttgggaaccatgggggt...276...	-ttgctgtgtatc	tgtgtgca
F.Cat	tggctctg	gtgagggga	GGGAgaGGT	ctGGCAGGGAGCC	CGGGA	aatttgggaaccatgggggt...268...	-ttgctgtgtatc	tgtgtgca
B.Tau	tggctctg	gtgagggga	GGGAgaGATT	ctGGCAGGGAGCC	CGGGA	aatttgggaaccatgggggt...278...	-ttgctgtgtaca	cgtgtgca
E.Cab	tggctctg	gtgagggga	GGGAgaGGT	ctGGCAGGGAGCC	CGGGA	aatttgggaaccatgggggt...280...	-ttgctgtgtatc	tgtgtgca
O.Avi	tggctctg	gtgagggga	GGGAgaGGT	ctGGCAGGGAGCC	CGGGA	aatttgggaaccatgggggt...279...	-ttgctgtgtaca	cgtgtgca
L.Afr	tggctctg	gtgaggggaggagacttct	GGCAGGGAGCC	CGGGA	aatttgggaaccatgggggt...272...	-ttgctgtgtatc		cgtgtgca
	*****	*****	*****	*****	*	*****	****	****

id=355337 gene=ENSG00000115216 name=NRBP1 segment=chr2.27658095.27658448.1 type=IN VIEW

Figure 140: CS=4.2



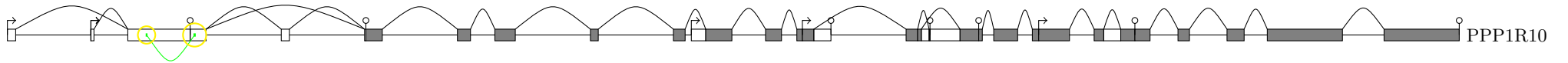
H. Sap	tggctctg	gtgaggggagggagaggttc	TGGGCAGGGGAGCCTCG	ggaatttgggaacccatgggg... 285...	tttctgtgtat	tgtatgca
R. Mac	tggctctg	gtgaggggagggagaggttc	TGGGCAGGGGAGCCTCG	ggaatttgggaacccatgggg... 282...	-ttgctgtgtatt	tgtgtgca
P. Tro	tggctctg	gtgaggggagggagaggttc	TGGGCAGGGGAGCCTCG	ggaatttgggaacccatgggg... 284...	tttctgtgtat	cgtatgca
P. Abe	tggctctg	gtgaggggagggagaggttc	TGGGCAGGGGAGCCTCG	ggaatttgggaacccatgggg... 286...	-ttgctgtgtatt	tgtatgca
C. Jac	tggctctg	gtgaggggagggagaggttc	TGGGCAGGGGAGCCTCG	ggaatttgggaacccatgggg... 284...	-ttgctgtgtatt	tgtgtgca
M. Mus	tggctctg	gtgaggggagggagagattc	TGGGCAGGGGAGCCTCG	ggaatttgggaacccatgggg... 276...	-ttgctgtgtatt	tgtgtgca
C. Por	tggctctg	gtgaggggagggagaggttc	TGGGCAGGGGAGCCTCG	ggactttgggaacccatgggg... 279...	-ttgctgtgtatc	tgtgtgca
O. Cun	tggctctg	gtgaggggagggagaggttc	TGGGCAGGGGAGCCTCG	ggaatctggggacccatgggg... 279...	-ttgctgtgtatc	tgtgtgca
C. Fam	tggctctg	gtgaggggagggagaggttc	TGGGCAGGGGAGCCTCG	ggaatttgggaacccatgggg... 278...	-ttgccgtgtatc	tgtgtgca
F. Cat	tggctctg	gtgaggggagggagaggttc	TGGGCAGGGGAGCCTCG	ggaatttgggaacccatgggg... 270...	-ttgccgtgtatc	tgtgtgca
B. Tau	tggctctg	gtgaggggagggagagattc	TGGGCAGGGGAGCCTCG	ggaatttgggaacccatgggg... 280...	-ttgctgtgtaca	cgtgtgca
E. Cab	tggctctg	gtgaggggagggagaggttc	TGGGCAGGGGAGCCTCG	ggaatttgggaacccatgggg... 282...	-ttgctgtgtatc	tgtgtgca
L. Afr	tggctctg	gtgaggggagggagagcttc	TGGGCAGGGGAGCCTCG	ggaatttgggaacccatgggg... 274...	-ttgctgtgtatc	cgtgtgca
*****	*****	*****	*****	*****	*****	*****

id=355337 gene=ENSG00000115216 name=NRBP1 segment=chr2_27658095_27658448.1 type=IN

H. Sap	ctgtgta-t	tgtatgcagtgt...87...	gttttcctccctcccgtta	CGGGCTGCTCTG	ttCCCA	acag	tctttcat
R. Mac	-tgtgtatt	tgtgtgcagtgt...87...	gttttcctccctcccgtta	CGGGCTGCTCTG	ttCCCA	acag	tctttcat
P. Tro	ctgtgta-t	cgtatgcagtgt...87...	gttttcctccctcccgtta	CGGGCTGCTCTG	ttCCCA	acag	tctttcat
P. Abe	-tgtgtatt	tgtatgcagtgt...87...	gttttcctccctcccgtta	CGGGCTGCTCTG	ttCCCA	acag	tctttcat
C. Jac	-tgtgtatt	tgtgtgcagtgt...84...	gttttcctccctcccgtta	CGGGCTGCTCTG	ttCCCA	acag	tctttcat
M. Mus	-tgtgtatt	tgtgtgcagtga...77...	gttttcctccctcccgtta	CGGGCTGCTCTG	ttCCCA	acag	tctttcat
C. Por	-tgtgtatc	tgtgtgcagtgg...83...	gttttcctccctcccgtta	CGGGCTGCTCTG	ttCCCA	acag	tctttcat
O. Cun	-tgtgtatc	tgtgtgcagtgt...87...	gttttcctccctcccgtta	CGGGCTGCTCTG	ttCCCA	acag	tctttcat
C. Fam	-cgtgtatc	tgtgtgcagtgt...87...	gttttcctccctcccgtta	CGGGCTGCTCTG	ttCCCA	acag	tctttcat
F. Cat	-cgtgtatc	tgtgtgcagtgt...87...	gttttcctccctcccgtta	CGGGCTGCTCTG	ttCCCA	acag	tctttcat
B. Tau	-tgtgtaca	cgtgtgcagtgt...86...	gttttcctccctcccgtta	CGGGCTGCTCTG	ttCCCA	acag	tctttcat
E. Cab	-tgtgtatc	tgtgtgcagtgt...84...	gttttcctccctcccgtta	CGGGCTGCTCTG	ttCCCA	acag	tctttcat
L. Afr	-tgtgtatc	cgtgtgcagtgt...87...	gttttcctccctcccgtta	CGGGCTGCTCTG	ttCCCA	acag	tctttcat
*****	*****	*****	*****	*****	*****	*****	*****

id=355338 gene=ENSG00000115216 name=NRBP1 segment=chr2_27658449_27658589.1 type=AN VIEW

Figure 141: CS=3.9



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R. Mac	tatcccag	gtttgaattttc...78...-----agaggggggaaagggaaaac-----	AGCAGCCACCAGCCCAA	ccACTTG	---tgtcttctgcccttcccac...251...-tgaggccccta	aataattg		
P. Tro	tatcccag	gtttgaattttc...77...-----agaggggggaaagggaaaac-----	AGCAGCCACCAGCCCAA	ccACTTG	---tgtcttctgcccttcccac...251...-tgaggccccta	aataattg		
P. Abe	tatcccag	gtttgaattttc...77...-----agaggggggaaagggaaaac-----	AGCAGCCACCAGCCCAA	ccACTTG	---tgtcttctgcccttcccac...252...-tgaggccccta	aataattg		
C. Jac	tatcccag	gtttgaattttc...79...-----agcggggggaagggaaaac-----	AGCAGCCACCAGCCCAA	ccACTTG	---tgtcttctgcccttcccac...254...-tgaggccccta	aataattg		
M. Mus	taccccag	g-ttgaattttct...71...-----gagaggggggaaagggaaaac-----	CAGCCACCAGCCCAA	ccACTCG	---tgtcttctgcccttcccac...258...-tgaggcccaca	agtaactg		
R. Nor	taccccag	g-ttgaattttct...74...-----agaggggggaaagggaaaac-----	AGCAGCCACCAGCCCAA	ccACTTG	---tgtcttctgcccttcccac...252...-tgaggcccaca	agtaactg		
C. Por	taccccag	gtttgaattttc...74...-----gaggggggaaagggaaaac-----	GCAGCCACCAGCCCAA	caaccactt	gtgtcttctgc-----...259...-tgaggccccta	agtaatcg		
C. Fam	tatcccag	gtttgaattttc...58...cccttgagagatcctgagg---GGGGAAAgGAAAAACAGCAGCCACCAGCCCAA	ccACTTG	---tgtcttctgcccttcccac...255...-tgaggccccta	aataattg			
F. Cat	tatcctag	gtttgaattttc...75...-----gaggggggaaagggaaaac-----	GCAGCCACCAGCCCAA	ccACTTG	---tgtcttctgcccttcccac...254...-tgaggccccta	aataattg		
B. Tau	tatcccag	gtttgaattttc...62...-----tgaaagatccagacagaggGGGGAAAgGAAAAGAGCAGCCACCAGCCCAA	ccACTTG	---tgtcttctgcccttcccac...255...-tgaggccccta	aataattg			
E. Cab	tatcccag	gtttgaattttc...75...-----agaggggggaaagggaaaac-----	AGCAGCCACCAGCCCAA	ccACTTG	---tgtcttctgcccttcccac...254...-tgaggccccta	aataattg		
S. Sus	tatcccag	gtttgaattttc...77...-----agaggggggaaagggaaaac-----	AGCAGCCACCAGCCCAA	ccACTTG	---tgtcttctgcccttcccac...256...-tgaggccccta	aataattg		
L. Afr	tatcccag	gtttgaattttc...65...-----aaagatcctgaggggggaa---AGGGAAAAcAGCAGCCACCAGCCCAA	ccACTTG	---tgtcttctgcccttcccac...255...-ggcccctcca	aataattg			
	** ** *	* ** *	**	*	***** **	*****	* ** *	* ** *

id=35244 gene=ENSG00000204569 name=PPP1R10 segment=chr6_30584361_30584775_-1 type=EN

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R. Mac	gcccccta	aataatTGAGTtTTGGGTcCTGGTTGGTTGTT	-----	ttatTTTTTTTctcTcaaaa...42...aaaaattggata	gtaagtgt
P. Tro	gcccccta	aataatTGAGTtTTGGGTcCTGGTTGGTTGTT	-----	ttatTTTTTTTctcTcaaaa...42...aaaaattggata	gtaagtgt
P. Abe	gcccccta	aataatTGAGTtTTGGGTcCTGGTTGGTTGTT	-----	ttatTTTTTTTctcTcaaaa...42...aaaaattggata	gtaagtgt
C. Jac	gcccccta	aataatTGAGTtTTGGGTcCTGGTTGGTTGTT	-----	ttatTTTTTTTctcTcaaaa...42...aaaaattggata	gtaagtgt
M. Mus	gccccaca	agtaacTGAG-TTTGGGTcCTGGTTGGTTG	-----	cttTatTTTTTTTctcTcaaa...43...aaaaattggata	gtaagtgt
R. Nor	gccccaca	agtaacTGAG-TTTGGGTcCTGGTTGGTTGTT	-----	ttatTTTTTTTctcTcaaaa...41...aaaaattggata	gtaagtgt
C. Por	gcccccta	agtaacTGAG-TTTGGGTcCTGGTTGGTTGTT	-----	ttatTTTTTTTctcTcaaat...43...aaaaattggata	gtaagtgt
C. Fam	gcccccta	aataatTGAGTtTTGGGTcCTGGTTGGTTGTT	TTGTTTTTTTCTCC	aaaattttaacccctcccc...28...aaaaattggata	gtaagtgt
F. Cat	gcccccta	aataatTGAGTtTTGGGTcTTGGTtGGTTGT	-----	ttatTTTTTTTctcTcaaaa...44...aaaaattggata	gtaagtgt
B. Tau	gcccccta	aataatTGAGTtTTGGGTcCTGGTTGGTTGTT	TTTCTCC	aaaattttaacccctcccc...28...aaaaattggata	gtaagtgt
E. Cab	gcccccta	agtaacTGAGTtTTGGGTcCTGGTTGGTTGTT	-----	ttatTTTTTTTctcTcaaaa...42...aaaaattggata	gtaagtgt
S. Sus	gcccccta	aataatTGAGTtTTGGGTcCTGGTTGGTTGTT	-----	ttatTTTTTTTctcTcaaaa...42...aaaaattggata	gtaagtgt
L. Afr	gcccccta	aataatTGAG-TTTGGGTcTTGGTtGGTTGTT	TTTTCTCCT	ccaaaattttaaaccccttc...29...aaaaattggata	gtaagtgt
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id=35245 gene=ENSG00000204569 name=PPP1R10 segment=chr6_30584255_30584360_-1 type=EN VIEW

Figure 142:



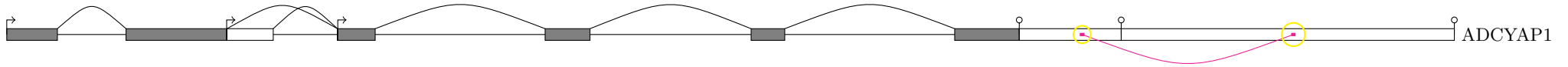
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R. Mac	gccccatga	aatggtg	cactctccctttaagactaagatggtggcttgctacgatcgggact	CCACTTCGGTGGG	gagggggcgggaccccagcccgcctcacgccggaagt	ggtttgcg
P. Tro	gccccatga	aatggtg	cactctccctttaagactaagatggtggcttgctacgatcgggact	CCACTTCGGTGGG	gagggggcgggaccccagcccgcctcacgccggaagt	ggtttgcg
P. Abe	gccccatga	aatggtg	cactctccctttaagactaagatggtggcttgctacgatcgggact	CCACTTCGGTGGG	gagggggcgggaccccagcccgcctcacgccggaagt	ggtttgcg
C. Jac	gccccatga	aatggtg	cactctccctttaagactaagatggtggcttgctacgatcgggact	CCACTTCGGTGGG	gagggggcgggaccccagcccgcctcacgccggaagt	ggtttgcg
C. Por	gccccgtaa	aattgtg	cactctccctttaagattaaatggtggctcgctatgaacagaaact	CCACTTCGGTGGG	AGGGggggcgggaccccagcccgcctcacgccggaagt	ggtttgag
O. Cun	accacaga	aatggtg	cactctccctttaagactaaaatggtggcttgctgcatcaggact	CCACTTCGGTGGG	gagggggcgggaccccagcccgcctcacgccggaagt	ggtttgcg
C. Fam	gtccacga	aatggtg	cactctccctttaagactaaaatggtggcttgctgcatcTGGAct	CCACTTCGGTGGG	gagggggcgggaccccagcccgcctcacgccggaagt	ggtttgcg
F. Cat	gtccacga	aacggtg	tactctccctttaagactaaaatggtggctggccacgatcaggact	CCACTTCGGTGGG	gagggggcgggaccccagcccgcctcacgccggaagt	ggtttgcg
B. Tau	gtccacca	aatggtg	tactctccctttaagactaaaatggtggcttgctacgatcaggact	CCACTTCGGTGGG	gagggggcgggaccccagcccgcctcacgccggaagt	ggtttgcg
E. Cab	gtccatga	aatggtg	tactctccctttaagactaaaatggtggcttgctacgatcTGGAct	CCACTTCGGTGGG	gagggggcgggaccccagcccgcctcacgccggaagt	ggtttgcg
S. Sus	gtctatga	aatggtg	tactctccctttaagactaaaatggtggcttgctgcatc--cact	CCACTTCGGTGGG	gagggggcgggaccccagcccgcctcacgccggaagt	ggtttgcg
O. Avi	gtccacca	aatggtg	tactctccctttaagactaaaatggtggcttgctacgatcTGGAct	CCACTTCGGTGGG	gagggggcgggaccccagcccgcctcacgccggaagt	ggtttgcg
L. Afr	ggccatga	aacagtg	cactctccctttaagactaagatggtggcttgctacgatcaggact	CCACTTCGGTGGG	ga-gggggcgggaccccagcccgcctcacgccggaagt	ggtttgcg
	*	*	**	***	*****	*****

id=467589 gene=ENSG00000170473 name=WIBG segment=chr12_56320910_56321013_-1 type=IN

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R. Mac	gccccatga	aatggtg	cactc...58...----	gggggcgggaccccagcccg	CTCAcg	CCGGAAGT	GGtttgcg
P. Tro	gccccatga	aatggtg	cactc...58...----	gggggcgggaccccagcccg	CTCAcg	CCGGAAGT	GGtttgcg
P. Abe	gccccatga	aatggtg	cactc...58...----	gggggcgggaccccagcccg	CTCAcg	CCGGAAGT	GGtttgcg
C. Jac	gccccatga	aatggtg	cactc...58...----	gggggcgggaccccagcccg	CTCAcg	CCGGAAGT	GGtttgcg
C. Por	gccccgtaa	aattgtg	cactc...54...gtagggggcgggaccccag	CCCTCTCAcg	CCGGAAGT	GGtttgag	
O. Cun	accacaga	aatggtg	cactc...58...----	gggggcgggaccccagcccg	CTCAcg	CCGGAAGT	GGtttgcg
C. Fam	gtccacga	aatggtg	cactc...58...----	gggggcgggaccccagcccg	CTCAcg	CCGGAAGT	GGTTTgcg
F. Cat	gtccacga	aacggtg	tactc...58...----	gggggcgggaccccagcccg	CTCAcg	CCGGAAGT	GGtttgcg
B. Tau	gtccacca	aatggtg	tactc...58...----	gggggcgggaccccagcccg	CTCAcg	CCGGAAGT	GGtttgcg
E. Cab	gtccatga	aatggtg	tactc...58...----	gggggcgggaccccagcccg	CTCAcg	CCGGAAGT	GGTTTgcg
S. Sus	gtctatga	aatggtg	tactc...56...----	gggggcgggaccccagcccg	CTCAcg	CCGGAAGT	GGtttgcg
O. Avi	gtccacca	aatggtg	tactc...58...----	gggggcgggaccccagcccg	CTCAcg	CCGGAAGT	GGTTTgcg
L. Afr	ggccatga	aacagtg	cactc...57...----	gggggcgggaccccagcccg	CTCAcg	CCGGAAGT	GGtttgctg
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Figure 143:



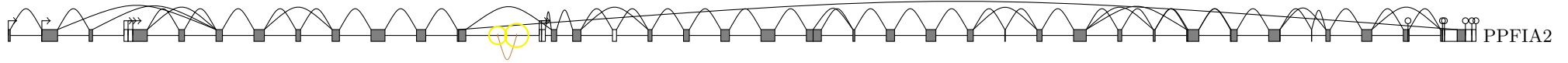
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R.Mac	atttgttag	c-gatgagttacc...138...-actgtttttctttt-tacaaa	GCACTAGAGaa	TGCAcagatatactttgtggacca-...62...cataca-aagcgt	gcacaagg
P.Tro	atttgttag	c-gatgagttacc...138...-attgtttttctttt-tacaaa	GCACTAGAGaa	TGCAcagatatactttgtggacca-...66...cataca-aagcgt	gcacaagg
P.Abe	atttgttag	c-gatgagttacc...138...-attgtttttctttt-tacgaa	GCACTAGAGaa	TGCAcagatatactttgtggacca-...62...cataca-aagcgt	gcacaagg
C.Jac	atttgttag	c-gctgagttacc...136...tattgtttttc-ttt-tacaaa	GCACTAGAGaa	TGCAcagatatactttgtggacca-...64...cataca-aagcgt	gcacaagg
M.Mus	acttgttag	cagatcagctgc-...125...-attgtttttctttt-tatgaa	GCACTAGAGaa	TGCAcagatatactttgtggacca-...60...-attaagatgggt	gcacaagg
R.Nor	acttgttag	c-gatgagttgcc...126...-attgtttttctttt-tacgaa	GCACTAGAGaa	TGCAcagatatactttgtggacca-...58...-attcataagcgt	gcacaagg
C.Por	ttttgttag	c-aatgagttacc...140...-ttgtttttctttt-tacaaa	GCACTAGAGaa	TGCAcagatatactttgtggacca-...64...cataca-gagcgt	gcacaagg
O.Cun	atttgttag	c-gaagagttacc...136...-attgtttttctttt-tacaaa	GCACTAGAGaa	TGCAcagatatactttgtggacca-...57...cataca-aagcgt	gcacaagg
C.Fam	atttgttag	c-gatgagttacc...140...-ttgtttttctttt-tacaaa	GCACTAGAGaa	TGCAcagatatactttgtggacca-...76...cataca-aagcgt	gcacaagg
F.Cat	atttgttag	c-gatgagttacc...137...-attgtttttctttt-tacaaa	GCACTAGAGaa	TGCAcagatatactttgtggacca-...71...cataca-aagcgt	gcacaagg
S.Sus	atttgttag	c-gatgagacacc...137...-attgtttttctttt-tacaaa	GCACTAGAGaa	TGCAcagatatactttgtggacca-...73...cataca-aagcgt	gcacaagg
L.Afr	atttgttag	c-gctgagttacc...142...-ttgtttttctttt-gtcaaaa	GCACTAGAGaa	TGCAc-aatatactttgtgaaccaa...60...catata-aagcgt	gcacaagg
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id=528265 gene=ENSG00000141433 name=ADCYAP1 segment=chr18_909637_909936_1 type=E3

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R.Mac	caaagcgt	gcacaaggattg...1698...atgtgacacgggatgcagtt	TGCAGCTTTAGTGC	ctttcttcgccttttaaat...442...taaacaatgcaa	cttggctc
P.Tro	caaagcgt	gcacaaggattg...1714...atgtgacacgggatgcagtt	TGCAGCTTTAGTGC	ctttcttcgccttttaaat...442...taaacaatgcaa	cttggctc
P.Abe	caaagcgt	gcacaaggattg...1712...atgtgacacgggatgcagtt	TGCAGCTTTAGTGC	ctttcttcgccttttaaat...442...taaacaatgcaa	cttggctc
C.Jac	caaagcgt	gcacaaggattg...1693...atgtgacacgggatgcagtt	TGCAGCTTTAGTGC	ctttcttcgccttttaaat...442...taaacaatgcaa	cttggctc
M.Mus	agatgggt	gcacaaggattg...1648...ttgtgacacgggatgcagtt	TGCAGCTTTAGTGC	ctttcttcgccttttaaat...427...taaacaatgcaa	cttggctc
R.Nor	ataagcgt	gcacaaggattg...1706...atgtgacacgggatgcagtt	TGCAGCTTTAGTGC	ctttcttcgccttttaaat...427...taaacaatgcaa	cttggctc
C.Por	cagagcgt	gcacaaggattg...1676...atgtgacacgggatgcagtt	TGCAGCTTTAGTGC	ctttcttcgccttttaaat...441...taaacaatgcaa	cttggctc
O.Cun	caaagcgt	gcacaaggattg...1703...atgtgacacgggatgcagtt	TGCAGCTTTAGTGC	ctttcttcgccttttaaat...442...taaacaatgcaa	cttggctc
C.Fam	caaagcgt	gcacaaggattg...1684...atgtgacacgggatgcagtt	TGCAGCTTTAGTGC	ctttcttcgccttttaaat...441...taaacaatgcaa	cttggctc
F.Cat	caaagcgt	gcacaaggattg...1715...atgtgacacgggatgcagtt	TGCAGCTTTAGTGC	ctttcttcgccttttaaat...442...taaacaatgcaa	cttggctc
S.Sus	caaagcgt	gcacaaggattg...1676...gtgtgacacgggatgcagtt	TGCAGCTTTAGTGC	ctttcttcgccttttaaat...440...taaacaatgcaa	cttggctc
L.Afr	taaagcgt	gcacaaggattg...1719...atgttacgtgggatgcagtt	TGCAGCTTTAGTGC	ctttcttcgccttttaaat...443...taaacaatgcaa	cttggctc
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Figure 144:



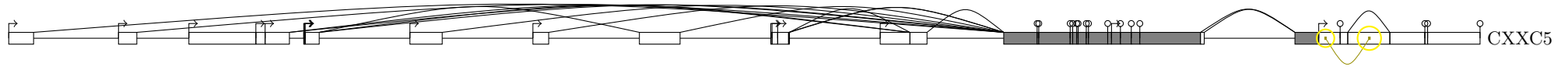
H. Sap	taaccaag	gtactgcactag...4542...-----aatttgctgtcacacttttc-	TTTTAAGCa	TTCTG	tgctatgttctgtttggtgt...369...tgctgatgcttg	gatgtaac
R. Mac	taaccaag	gtactgcattag...4542...-----aatttgctgtcacacttttc-	TTTTAAGCa	TTCTG	tgctatgttctgttcagtg...369...tgctgatgcttg	gatgtaac
P. Tro	taaccaag	gtactgcactag...4542...-----aatttgctgtcacacttttc-	TTTTAAGCa	TTCTG	tgctatgttctgtttggtgt...369...tgctgatgcttg	gatgtaac
P. Abe	taaccaag	gtactgcactag...4542...-----aatttgctgtcacacttttc-	TTTTAAGCa	TTCTG	tgctatgttctgtttggtgt...369...tgctgatgcttg	gatgtaac
M. Mus	taacaaag	gtactgcactaa...4346...gtattgaatttgccgtcac---TTTTATTTAAGCa	TTCTG	tactatgttctgtttggtgt...377...tgctgatgcttg	gatggaac	
R. Nor	taacaaag	gtactgcactaa...4535...--ttgaatttgccgtcac---TTTTATTTAAGCa	TTCTG	tactatgttctgtttggtgt...375...tgctgatgcttg	gatgtaac	
C. Por	taactaag	gtactgcactaa...3192...--attaaatttgctgtcacact-TTTATTTAAGCa	TTCTG	tgctatgttctgttcagtg...369...tgctgatgcttg	gatgtaac	
O. Cun	taacaaag	gtactgtactaa...4544...-----tatttgctgtcacacttttc-	TTTTAAGCa	TTCTG	tgctatgttctgttcagtg...367...tgctgatgcttg	gatgtaac
C. Fam	tgacaaag	gtattgcaataa...4542...-----aatttgctgtcacacttttc-	TTTTAAGCa	TTCTG	tgctatgttctgttcagtg...369...tgctgatgcttg	gatgtaac
F. Cat	tgacaaag	gtattgcataa...4542...-----aatttgctgtcacacttttc-	TTTTAAGCa	TTCTG	tgctatgttctgttcagtg...369...tgctgatgcttg	gatgtaac
B. Tau	tgacaaag	gtactacaataa...4541...-----aatttgctgtcacacttttc-	TTTTAAGCa	TTCTG	tgctatgttctgttcagtg...370...tgctgatgcttg	gatgtgac
E. Cab	tgacaaag	gtactgcaataa...4542...-----aatttgccgtcacgcttttc-	TTTTAAGCa	TTCTG	tgctatgttctgttcagtg...369...tgctgatgcttg	gatgtaac
S. Sus	tgacaaag	gtattgcaataa...4542...-----aatttgctgtcacacttttc-	TTTTAAGCa	TTCTG	tgctatgttctgttcagtg...369...tgctgatgcttg	gatgtaac
O. Avi	tgacaaag	gtactacgataa...4541...-----aatttgctgtcacacttttc-	TTTTAAGCa	TTCTG	tgctatgttctgttcagtg...370...tgctgatgcttg	gatgtgac
		* ** *** ** * **	***** **	** ***** **	**** ** **	***** **

id=317611 gene=ENSG00000139220 name=PPFIA2 segment=chr12.81763165_81768412_-1 type=IN

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R. Mac	taaccaag	gtactgcattag...4843...atctgtgcagttcagtgctt	CAGGAGCTTAAGA	-ttggacaatggcaggtttgt-----..69...tgctgatgcttg	gatgtaac
P. Tro	taaccaag	gtactgcactag...4843...atctgtgcagttcagtgctt	CAGGAGCTTAAGA	-ttggacaatggcaggtttgt-----..69...tgctgatgcttg	gatgtaac
P. Abe	taaccaag	gtactgcactag...4843...atctgtgcagttcagtgctt	CAGGAGCTTAAGA	-ttggacaatggcaggtttgt-----..69...tgctgatgcttg	gatgtaac
M. Mus	taacaaag	gtactgcactaa...4659...atctgtgcagttcagtgctt	CAGGAGCTTAAGAT	TGGA-caatggcaggtttgtgttca...64...tgctgatgcttg	gatggaac
R. Nor	taacaaag	gtactgcactaa...4843...atctgtgcagttcagtgctt	CAGGAGCTTAAGAT	tt-gacaatggcaggtttgtg---..68...tgctgatgcttg	gatgtaac
C. Por	taactaag	gtactgcactaa...3497...atctgtgcagttcagtgctt	CAGGAGCTTAAGAT	TGGA-ctatggcaggtttgtgttca...64...tgctgatgcttg	gatgtaac
O. Cun	taacaaag	gtactgtactaa...4843...atctgtgcagttcagtgctt	CAGGAGCTTAAGA	-ttggacaatggcaggtttgt-----..69...tgctgatgcttg	gatgtaac
C. Fam	tgacaaag	gtattgcaataa...4843...atctgtgcagttcagtgctt	CAGGAGCTTAAGA	-ttggacaatggcaggtttgt-----..69...tgctgatgcttg	gatgtaac
F. Cat	tgacaaag	gtattgcataa...4843...atctgtgcagttcagtgctt	CAGGAGCTTAAGA	-ttggacaatggcaggtttgt-----..69...tgctgatgcttg	gatgtaac
B. Tau	tgacaaag	gtactacaataa...4843...atctgtgcagttgagtgctt	CAGGAGCTTAAGA	-ttggacaatggcaggtttgt-----..69...tgctgatgcttg	gatgtgac
E. Cab	tgacaaag	gtactgcaataa...4843...atctgtgcagttcagtgctt	CAGGAGCTTAAGA	-ttggacaatggcaggtttgt-----..69...tgctgatgcttg	gatgtaac
S. Sus	tgacaaag	gtattgcaataa...4843...atctgtgcagttcagtgctt	CAGGAGCTTAAGA	-ttggacaatggcaggtttgt-----..69...tgctgatgcttg	gatgtaac
O. Avi	tgacaaag	gtactacgataa...4843...atctgtgcagttgagtgctt	CAGGAGCTTAAGA	-ttggacaatggcaggtttgt-----..69...tgctgatgcttg	gatgtgac
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id=317611 gene=ENSG00000139220 name=PPFIA2 segment=chr12.81763165_81768412_-1 type=IN VIEW

Figure 145:



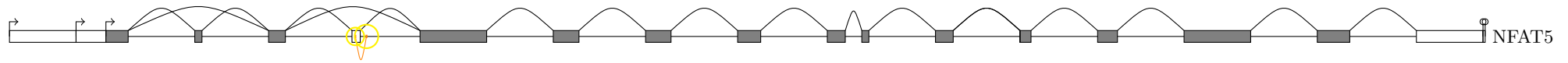
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P. Tro	caaacgga	tgcaccgctctttagaaccaaaa	ATATTCTCTCACAGATT	CATTCTGT	ttttatatatatat	ttttttg...36..	agaaaagaaaa	aaatttaa
P. Abe	caaacgga	tgcaccgctctttagaaccaaaa	ATATTCTCTCACAGATT	CATTCTGT	ttttatatatatat	ttttttg...36..	agaaaagaaaa	aaatttaa
C. Jac	caaatgga	tgcaccgctctttagaaccaaaa	ATATTCTCTCACAGATT	CATTCTGT	ttttatatatatat	ttttttg...41..	aagaaatgaaaa	caatttta
M. Mus	caaacgga	tgcaccgctctttagaaccaaaa	ATATTCTCTCACAGA	-----	tttcattcctgtttt	tatat...56..	agaaaagaaaa	aaatttta
R. Nor	caaacgga	tgcaccgctctttagaaccaaaa	ATATTCTCTCACAGA	-----	tttcattcctgtttt	tatat...50..	agaaaagaaaa	aaatttta
C. Por	aaaacgga	tgcaccgctctttagaaccaaaa	ATATTCTCTCACAGA	-----	tttcattcctgtttt	tatat...48..	agaaaagaaaa	aaattttc
C. Fam	caaacgga	tgcaccgctctttagaaccaaaa	ATATTCTCTCACAGATT	CATTCTGT	ttttatatatatat	ttttttg...36..	agaaaagaaaa	aaatttta
F. Cat	caaacgga	tgcaccgctctttagaaccaaaa	ATATTCTCTCACAGATT	CATTCTGT	ttttatatatatat	ttttttg...37..	gaaaagaaaa	aaatttta
B. Tau	caaacgga	tgcaccgctctttagaaccaaaa	ATATTCTCTCACAGATT	CATTCTGT	ttttatatatatat	ttttttg...42..	aagaaaagaaaa	aaaattta
E. Cab	caaacgga	tgcaccgctctttagaaccaaaa	ATATTCTCTCACAGATT	CATTCTGT	ttttatatatatat	ttttgtg...43..	gaaaagaaaa	aaaattta
S. Sus	aaaacgga	tgcaccgctctttagaaccaaaa	ATATTCTCTCACAGATT	CATTCTGT	ttttatatatatat	ttttttg...51..	aaaaaaaaaaaa	aaaaagta
L. Afr	caaacgga	tgcaccgctctttagaaccaaaa	ATATTCTCTCACAGATT	CATTCTGT	ttttatatatatat	ttttttg...39..	gaaaaggaaaa	aaatttta
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id=319036 gene=ENSG00000171604 name=CXXC5 segment=chr5_139062579_139062696.1 type=EN

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R. Mac	aaaaagag	gtaaagacgaat...56...	---tcgatg	tcgatg	tgtgtctgt	GCAGG	GATG	AGTT	TTGTG	AGAGA	AATGT	aaat	tttctg	taacct	tttg...81...	accatgaaa-tag	tgcatagt	
P. Tro	aaaaagag	gtaaagacgaat...53...	gtgtc	gatg	tcga---	tgtctgt	GCAGG	GATG	AGTT	TTGTG	AGAGA	AATGT	aaat	tttctg	taacct	tttg...81...	accatgaaa-tag	tgcatagt
P. Abe	aaaaagag	gtaaagacgaat...56...	---tcaatg	tgtgat	tgtgtctgt	GCAGG	GATG	AGTT	TTGTG	AGAGA	AATGT	aaat	tttctg	taacct	tttg...81...	accatgaaa-tag	tgcatagt	
C. Jac	aaaaagag	gtaaagacgaat...56...	---ttgatg	tcgatg	tgtgtctgt	GCAGG	GATG	AGTT	TTGTG	AGAGA	AATGT	aaat	tttctg	taacct	tttg...81...	accatgaaa-tag	tgcatagt	
M. Mus	caagagag	gtaaagacgaat...77...	---tctgtg	cgggag	atgctgtt	-----	TTTGTG	AGAGA	AATGT	aaat	tttctg	taacct	tttg...83...	accatgaaa-tag	tgcatagt			
R. Nor	caagagag	gtaaagacgaat...71...	---tctgtg	cgggag	atgctgtt	-----	TTTGTG	AGAGA	AATGT	aaat	tttctg	taacct	tttg...82...	accatgaaa-tag	tgcatagt			
C. Por	aaaaagag	gtaaagacgaat...71...	---tctgtg	caggag	atgctgtt	-----	TTTGTG	AGAGA	AATGT	aaat	tttctg	taacct	tttg...82...	ccatgaaa-tag	tgcatagt			
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F. Cat	aaaaagag	gtagagacgaat...56...	---tcgatg	tcgatg	tgtgtctgt	GCAGG	GATG	AGTT	TTGTG	AGAGA	AATGT	aaat	tttctg	taacct	tttg...81...	accatgaaa-tag	tgcatagt	
B. Tau	aaaaagag	gtaaagacgaat...56...	---tcgatg	tcgatg	tgtgtctgt	GCAGG	GATG	AGTT	TTGTG	AGAGA	AATGT	aaat	tttctg	taacct	tttg...81...	accatgaaa-tag	tgcatagt	
E. Cab	aaaaagag	gtaaagacgaat...56...	---tcgatg	tcgatg	tgtgtctgt	GCAGG	GATG	AGTT	TTGTG	AGAGA	AATGT	aaat	tttctg	taacct	tttg...81...	accatgaaa-tag	tgcatagt	
S. Sus	aaaaagag	gtaaagacgaat...56...	---tcgatg	tcgatg	tgtgtctgt	GCAGG	GATG	AGTT	TTGTG	AGAGA	AATGT	aaat	tttctg	taacct	tttg...77...	accatgaaa-tag	tgcatagt	
L. Afr	aaacagag	gtaaagaggaat...56...	---tcgatg	tcgatg	tgtgtctgt	GCAGG	GATG	AGTT	TTGTG	AGAGA	AATGT	aaat	tttctg	taacct	tttg...80...	accatgaaa-tag	tgcatagt	
	** ****	*** ** ****			* **				*****	*****			*****	***	*****			

id=319038 gene=ENSG00000171604 name=CXXC5 segment=chr5_139062739_139062970.1 type=AN VIEW

Figure 146:



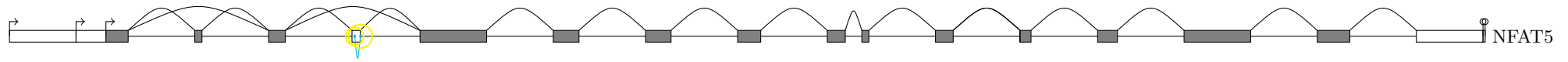
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R.Mac	tattccag	gatttgcctctGAAGcaGGGAGTGTctgcattaaaaatgacctgtagttctctgcttcatag	gtagaaa
P.Tro	tattccag	gatttgcctctGAAGcaGGGAGTGTctgcattaaaaatgacctgtagttctctgcttcatag	gtagaaa
P.Abe	tattccag	gatttgcctctGAAGcaGGGAGTGTctgcattaaaaatgacctgtagttctctgcttcatag	gtagaaa
C.Jac	tattccag	gatttgcctctGAAGcaGGGAGTGTctgcattaaaaatgacctgtagttctctgcttcatag	gtagaaa
M.Mus	tattccag	gatttgcctctGAAGcaGGGAGTGTctgcattaaaaatgacctgtagttctctgcttcatag	gtagaaa
R.Nor	tattccag	gatttgcctctGAAGcaGGGAGTGTctgcattaaaaatgacctgtagttctctgcttcatag	gtagaaa
C.Por	tattccag	gatttgcctctGAAGcaGGGAGTGTctgcattaaaaatgacctgtagttctctgcttcatag	gtagaaa
O.Cun	tattccag	gatttgcctctGAAGcaGGGAGTGTctgcattaaaaatgacctgtagttctctgcttcatag	gtagaaa
C.Fam	tattccag	gatttgcctctGAAGcaGGGAGTGTctgcattaaaaatgacctgtagttctctgcttcatag	gtagaaa
B.Tau	tattccag	gatttgcctctGAAGcaGGGAGTGTctgcattaaaaatgacctgtagttctctgcttcatag	gtagaaa
E.Cab	tattccag	gatttgcctctGAAGcaGGGAGTGTctgcattaaaaatgacctgtagttctctgcttcatag	gtagaaa
S.Sus	tattccag	gatttgcctctGAAGcaGGGAGTGTctgcattaaaaatgacctgtagttctctgcttcatag	gtagaaa
O.Avi	tattccag	gatttgcctctGAAGcaGGGAGTGTctgcattaaaaatgacctgtagttctctgcttcatag	gtagaaa
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id=767954 gene=ENSG00000102908 name=NFAT5 segment=chr16_69680420_69680481_1 type=AN

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C.Jac	cttcatag	gtagaaaacttattttaatattttgtggctaaGCACagTCCCaCTTT-tcaaattcga--taatgaatta...369...tgtacactgcag	atgcttct
M.Mus	cttcatag	gtagaaaacttattttaatattttgtggctaaGCACagTCCCaCTTT-tcaaattcta--taatgaatta...373...tatacactgcag	atgcttct
R.Nor	cttcatag	gtagaaaacttattttaatattttgtggctaaGCACagTCCCaCTTT-tcaaattcta--taatgaatta...373...tgtacaccgcag	atgcttct
C.Por	cttcatag	gtagaaaacttattttaatattttgtggctaaGCACagTCCCaCTTT-tcaaattcta--taatgaatta...380...tgtacactgcag	atgcttct
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L.Afr	cttcatag	gtagaaaacttattttaatattttgtggctaaGCACagTCCCaCTTTtcaaattctatgtaatgaa---...402...tatacactgcag	atgcttct
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id=767955 gene=ENSG00000102908 name=NFAT5 segment=chr16_69680482_69680930_1 type=IN VIEW

Figure 147:



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P.Tro tattccag gatttGCCTcTGAAGCAGGGAGTgtctgcattaaaaatgacctgtagttctctgcttcatag gttagaaa
P.Abe tattccag gatttGCCTcTGAAGCAGGGAGTgtctgcattaaaaatgacctgtagttctctgcttcatag gttagaaa
C.Jac tattccag gatttGCCTcTGAAGCAGGGAGTgtctgcattaaaaatgacctgtagttctctgcttcatag gttagaaa
M.Mus tattccag gatttGCCTcTGAAGCAGGGAGTgtctgcattaaaaatgacctgtagttctctgcttcatag gttagaaa
R.Nor tattccag gatttGCCTcTGAAGCAGGGAGTgtctgcattaaaaatgacctgtagttctctgcttcatag gttagaaa
C.Por tattccag gatttGCCTcTGAAGCAGGGAGTgtctgcattaaaaatgacctgtagttctctgcttcatag gttagaaa
O.Cun tattccag gatttGCCTcTGAAGCAGGGAGTgtctgcattaaaaatgacctgtagttctctgcttcatag gttagaaa
C.Fam tattccag gatttGCCTcTGAAGCAGGGAGTgtctgcattaaaaatgacctgtagttctctgcttcatag gttagaaa
B.Tau tattccag gatttGCCTcTGAAGCAGGGAGTgtctgcattaaaaatgacctgtagttctctgcttcatag gttagaaa
E.Cab tattccag gatttGCCTcTGAAGCAGGGAGTgtctgcattaaaaatgacctgtagttctctgcttcatag gttagaaa
S.Sus tattccag gatttGCCTcTGAAGCAGGGAGTgtctgcattaaaaatgacctgtagttctctgcttcatag gttagaaa
O.Avi tattccag gatttGCCTcTGAAGCAGGGAGTgtctgcattaaaaatgacctgtagttctctgcttcatag gttagaaa
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id=767954 gene=ENSG00000102908 name=NFAT5 segment=chr16_69680420_69680481_1 type=AN

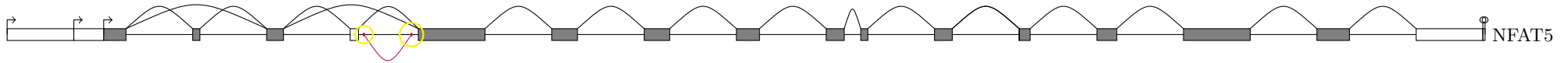
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R.Nor tattccag gatttgcctctgaagcagggagtgctgcattaaaaatgacctgtaGTTCTCTGCTTCAtAG GTtagaaa
C.Por tattccag gatttgcctctgaagcagggagtgctgcattaaaaatgacctgtaGTTCTCTGCTTCAtAG GTtagaaa
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S.Sus tattccag gatttgcctctgaagcagggagtgctgcattaaaaatgacctgtaGTTCTCTGCTTCAtAG GTtagaaa
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id=767954 gene=ENSG00000102908 name=NFAT5 segment=chr16_69680420_69680481_1 type=AN VIEW

Figure 148:



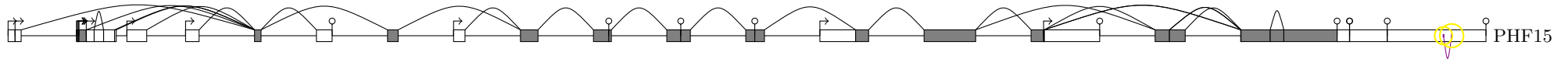
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R.Mac	cttcatag	gttagaacttattttaatattttg	TGGCTaAGCAcaGTCCCA	-cttttcaaattctataatga...	374...	tgtacactgcag	atgcttct
P.Tro	cttcatag	gttagaacttattttaatattttg	TGGCTaAGCAcaGTCCCA	-cttttcaaattctataatga...	374...	tgtacactgcag	atgcttct
P.Abe	cttcatag	gttagaacttattttaatattttg	TGGCTaAGCAcaGTCCCA	-cttttcaaattctataatga...	374...	tgtacactgcag	atgcttct
C.Jac	cttcatag	gttagaacttattttaatattttg	TGGCTaAGCAcaGTCCCA	-cttttcaaattcgataatga...	373...	tgtacactgcag	atgcttct
M.Mus	cttcatag	gttagaacttattttaatattttg	TGGCTaAGCAcaGTCCCA	-cttttcaaattctataatga...	377...	tataactgcag	atgcttct
R.Nor	cttcatag	gttagaacttattttaatattttg	TGGCTaAGCAcaGTCCCA	-cttttcaaattctataatga...	377...	tgtacaccgcag	atgcttct
C.Por	cttcatag	gttagaacttattttaatattttg	TGGCTaAGCAcaGTCCCA	-cttttcaaattctataatga...	384...	tgtacactgcag	atgcttct
O.Cun	cttcatag	gttagaacttattttaatattttg	TGGCTaAGCAcaGTCCCA	-cttttcaaattctataatga...	369...	tgtacactgcag	atgcttct
C.Fam	cttcatag	gttagaacttattttaatattttg	TGGCTaAGCAcaGTCCCA	-cttttcaaattctataatgg...	369...	tgtacaccgcag	atgcttct
B.Tau	cttcatag	gttagaacttattttaatattttg	TGGCTaAGCAcaGTCCCA	-cttttcaaattctataatga...	376...	tgtacactgcag	atgcttct
E.Cab	cttcatag	gttagaacttattttaatattttg	TGGCTaAGCAcaGTCCCA	-cttttcaaattttataatga...	366...	tgtacaccgcag	atgcttct
S.Sus	cttcatag	gttagaacttattttaatattttg	TGGCTaAGCAcaGTCCCA	-cttttcaaattctataatga...	372...	tgtacactgcag	atgcttct
O.Avi	cttcatag	gttagaacttattttaatattttg	TGGCTaAGCAcaGTCCCA	-cttttcaaattctataatga...	373...	tgtacactgcag	atgcttct
L.Afr	cttcatag	gttagaacttattttaatattttg	TGGCTaAGCAcaGTCCCA	cttttcaaattctat-gtaa...	406...	tataactgcag	atgcttct
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P.Tro	cttcatag	gttagaactta...	351...	-ttcacaaatcaca-ttttcaa	TGGGACTGCTAGCCA	gcataggtgaaacatgtagtg-	tatttactcttgaattgtacactgcag	atgcttct
P.Abe	cttcatag	gttagaactta...	351...	-ttcacaaatcaca-ttttcaa	TGGGACTGCTAGCCA	gcataggtgaaacatgtagtg-	tatttactcttgaattgtacactgcag	atgcttct
C.Jac	cttcatag	gttagaactta...	350...	gttcgc-aatcaca-ttttcaa	TGGGACTGCTAGCCA	gcataggtgaaacatgtagtg-	tatttactcttgaattgtacactgcag	atgcttct
M.Mus	cttcatag	gttagaactta...	354...	-ttcacaaatcaca-ttttcat	TGGGACTGCTAGCCA	gcctaggtgaaacatgtagtg-	tacttactcttgattatacactgcag	atgcttct
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E.Cab	cttcatag	gttagaactta...	343...	-ttcacaaatcacg-ttttcaa	TGGGACTGCTAGCCA	gcataggtgaaacatgtagtg-	tatttactcttaaattgtacaccgcag	atgcttct
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L.Afr	cttcatag	gttagaactta...	383...	-nnnnnnnnnnnn-nnnnnaa	TGGGACTGCTAGCCA	gcataggt-aaaacatgtagtg	tatttactctcgaattatacactgcag	atgcttct
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id=767955 gene=ENSG00000102908 name=NFAT5 segment=chr16_69680482_69680930_1 type=IN VIEW

Figure 149:



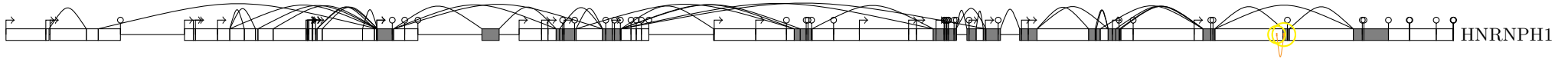
H. Sap	agagtcta	ctcactgtcaca...2982...agaaagtgatgtgccatttg	TTAATATAcAAGAgAAATATTGaaAATATATTGAAAA	gagcaattttaaattatttt-----	.331...-tgttttctgtgc	tggtctggt
R. Mac	agagtcta	ctcactgtcaca...2962...agaaagtgatgtgccatttg	TTAATATAcAAGAgAAATATTGaaAATATATTGAAAA	gagcaattttaaattatttt-----	.331...-tgttttctgtgc	tggtctggt
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C. Jac	agagtcta	ctcactgtcaca...2930...agaaagtgatgtgccatttg	TTAATATAcAAGAgAAATATTGaaAATATATTGAAAA	gagcaattttaaattatttt-----	.328...-tgttttctgtgc	tggtctggt
M. Mus	ccagtcta	ttcactgtcaca...2515...agaaagtgatgtgccatttg	TTAATATAcAAGAgAAATATTG-----	aaaaatatattgaaaagag...352...-tgttctctgtgc	tggtctggt	tggtctggt
R. Nor	ccagtcta	ttcactgtcaca...2876...agaaagtgatgtgccatttg	TTAATATAcAAGAgAAATATTGaaAATATATTGAAAA	gagcaattttaaattatttt-----	.338...-tgttttctgtgc	tggtctggt
C. Por	agagcccg	ctcactgtcaca...2921...agaaagtgatgtgccatttg	TTAATATAcAAGAgAAATATTGaaAATATATTGAAAA	gagcaattttaaattatttt-----	.334...-atgttttctgtg-	tggtctggt
O. Cun	agagactg	ctcactgtcaca...2577...agaaagtgatgtgccatttg	TTAATATAcAAGAgAAATATTGaaAATATATTGAAAA	gagcaa-tttaaattatttt-----	.319...-tgttttctgtgc	tggtctggt
C. Fam	agagtcta	ctcactgtcaca...3060...agaaagtgatgtgccatttg	TTAATATAcAAGAgAAATATTGaaAATATATTGAAAA	gagcaattttaaattatttt-----	.331...-tgttttctgtgc	tggtctggt
F. Cat	agagtcta	ctcactgtcaca...2932...agaaagtgatgtgccatttg	TTAATATAcAAGAgAAATATTGaaAATATATTGAAAA	gagcaattttaaattatttt-----	.332...-tgttttctgtgc	tggtctggt
E. Cab	agagtcta	ctcactgtcaca...2971...agaaagtgatgtgccatttg	TTAATATAcAAGAgAAATA-----	ctgaaaatatattgaaaaga...349...-tgttttctgtgc	tggtctggt	tggtctggt
L. Afr	agagtcta	ctcactgtcaca...3170...agaaagtgatgtgccatttg	TTAATATAcAAGAgAAATATTGaaAATATATTGAAAA	gagcaattttaaattatttt-----	.339...-tgttttctgtgc	tggtctggt
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id=325580 gene=ENSG0000043143 name=PHF15 segment=chr5_133915505_133918918_1 type=E3

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R. Mac	agagtcta	ctcactgtcaca...3015...-aaaagagcaattttaaatta	TTTTGGctTATGTTgCAATATTTATTTCTGTATTAG	aaaagattcctttgtagaga...276...-tgttttctgtgc	tggtctggt
P. Tro	agagtcta	ctcactgtcaca...3025...-aaaagagcaattttaaatta	TTTTGGctTATGTTgCAATATTTATTTCTGTATTAG	aaaagattcctttgtagaga...276...-tgttttctgtgc	tggtctggt
P. Abe	agagtcta	ctcactgtcaca...2969...-aaaagagcaattttaaatta	TTTTGGctTATGTTgCAATATTTATTTCTGTATTAG	aaaagattcctttgtagaga...276...-tgttttctgtgc	tggtctggt
C. Jac	agagtcta	ctcactgtcaca...2983...-aaaagagcaattttaaatta	TTTTGGctTATGTTgCAATATTTATTTCTGTATTAG	aaaagattcctttgtagaga...273...-tgttttctgtgc	tggtctggt
M. Mus	ccagtcta	ttcactgtcaca...2586...-atatttttgcttatgttg	-----CAATATTTATTTCTGTATTAG	gagaagattcctttgtagaga...280...-tgttctctgtgc	tggtctggt
R. Nor	ccagtcta	ttcactgtcaca...2929...-aaaagagcaattttaaatta	TTTTGGctTATGTTgCAATATTTATTTCTGTATTAG	gagaagattcctttgtagaga...283...-tgttttctgtgc	tggtctggt
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E. Cab	agagtcta	ctcactgtcaca...3047...------	ttggcttatgttgcaatt-----TATTTCTGTATTAG	gagaagattcctttgtagaga...276...-tgttttctgtgc	tggtctggt
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Figure 150:



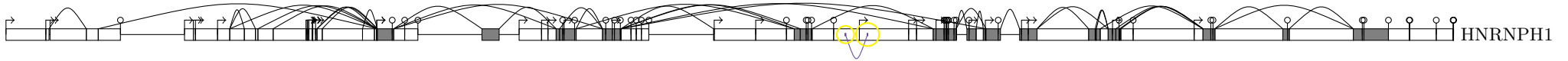
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C.Jac	tggatcacg	gt-aagcattttt...	352...	.ggattggttttatttttttttc-	AA-TTGGTCTAAA	---tggtgattttggtattatagtcttacctacaaaatccttttgca	accaagtt
M.Mus	cggatatg	gt-gagtgatttt...	311...	-tttttggttttttttttttttc-	AA-TTGGTCTAAAG	-aatggtgattttggtattatagtcttacctacaaaatccttttgca	accaagtt
R.Nor	cggatatg	gt-gagtgtttt...	313...	-tttttggttttttttttttttc-	AA-TTGGTCTAAAG	-aatggtgattttggtattatagtcttacctacaaaatccttttgca	accaagtt
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P.Tro	tggatcacg	gtaaagcctggt...	488...	-agtccttacctacaaaatcc	TTTTGcaG	ACCaAGTt
P.Abe	tggatcacg	gt-aagcctggtt...	417...	-agtccttacctacaaaatcc	TTTTGcaG	ACCaAGTt
C.Jac	tggatcacg	gt-aagcattttt...	403...	-gtccttacctacaaaatcc	TTTTGcaG	ACCaAGTt
M.Mus	cggatatg	gt-gagtgatttt...	364...	-agtccttacctacaaaatcc	TTTTGcaG	ACCaAGTt
R.Nor	cggatatg	gt-gagtgtttt...	366...	-agtccttacctacaaaatcc	TTTTGcaG	ACCaAGTt
C.Por	tggctacg	gt-aagcctttgt...	397...	-agtccttacctacaaaatcc	TTTTGcaG	ACCaAGTt
O.Cun	tggatcacg	gt-aagcccgtt...	414...	-agtccttacctacaaaatcc	TTTTGcaG	ACCaAGTt
C.Fam	tggatatg	gt-aaggatgtct...	426...	-agtccttacctacaaaatcc	TTTTGcaG	ACCaAGTt
F.Cat	tggatatg	gt-aagtgtgtt...	431...	-agtccttacctacaaaatcc	TTTTGcaG	ACCaAGTt
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S.Sus	tggatatg	gt-aagtgtattt...	450...	-agtccttacctacaaaatcc	TTTTGcaG	ACCaAGTt
L.Afr	tggatatg	gt-aagtatggtt...	405...	-agtccttacctacaaaatcc	TTTTGcaG	ACCaAGTt
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Figure 151: CS=8.4



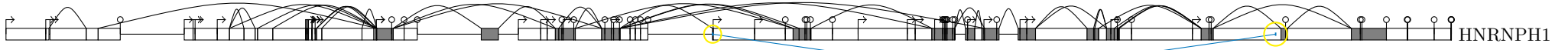
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S. Sus	ttaaatt	tagattttgcaa...51...----	ttaacccaatcaatggag	TTGAGAGaCTATGGCTTTAaaAATGTtaATGCA	aacctgctttagctgtaat---	...	60...ttaaagttgaaa	tgcaacaa
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P. Tro	agttgaaa	tgcaacaaacttttcttgctg	tataataatattctgcata-gtattaat	AAGCATAGCTTTCAA	gaaattgtc	cacaaaagggtt...290...ttttctataaa	gtttacat
P. Abe	agttgaaa	tgcaacaaacttttcttgctg	tataataatattctgcata-gtattaat	AAGCATAGCTTTCAA	gaaattgtc	cacaaaagggtt...288...ttttctataaa	gtttacat
C. Jac	agttgaaa	tgcaacaaacttttcttgctg	tataataatattctgcata-gtattaat	AAGCATAGCTTTCAA	gaaattgtc	cacaaaagggtt...286...ttttcctataaa	gtatacat
M. Mus	agttgaaa	tgcaacaaacttttcttgctg	-tataataatattctgcata-gtattaat	AAGCATAGCTTTCAA	gaaattgtc	cacaaaagggtt...275...ttttctataaa	gtttacat
R. Nor	agttgaaa	tgcaacaaacttttcttgctg	-tataataatattctgcata-gtattaat	AAGCATAGCTTTCAA	gaaattgtc	cacaaaagggtt...290...ttttcctataaa	gtttacat
C. Por	agttgaaa	tgcaacaaacttttcttgctg	-tataataatattctgcata-gtattaat	AAGCATAGCTTTCAA	gaaattgtc	cacaaaagggtt...282...ttttcctgtaa	atttacat
O. Cun	agttgaaa	tgcaacaaacttttcttgctg	-tataataatattctgcata-gtattaat	AAGCATAGCTTTCAA	gaaattgtc	cacaaaagggtt...281...ttttcctataaa	atttacat
C. Fam	agttgaaa	tgcaacaaacttttcttgctg	-tataataatattctgcata-gtattaat	AAGCATAGCTTTCAA	gaaattgtc	cacaaaagggtt...279...tctatatataaa	gtttacat
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id=427512 gene=ENSG00000169045 name=HNRNPH1 segment=chr5_179045517_179045900_-1 type=AN VIEW

Figure 152:



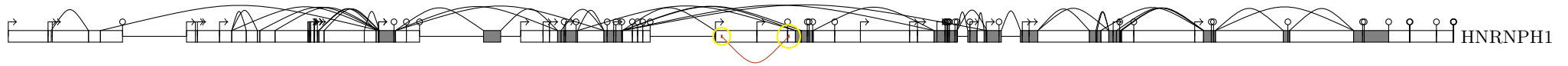
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R.Mac	ttagtatt	atagttcagagt...	580...	tcaacgttaaatatgaacat	AATTCATaTCTTcTAG	Gaaagtgc-
P.Tro	ttagtatt	atagttcagagt...	589...	tcaacgttaaatatgaacat	AATTCATaTCTTcTAG	Gaaagtgc-
P.Abe	ttagtatt	atagttcagagt...	614...	tcaacgttaaatatgaacat	AATTCATaTCTTcTAG	Gaaagtgc-
M.Mus	ttagtatt	gtagttcagagt...	580...	tcaacgttaaatatgaacat	AATTCATaTCTTcTAG	Gaaagtgc-
R.Nor	ttagtatt	gtagttcagagt...	587...	tcaacgttaaatatgaacat	AATTCATaTCTTcTAG	Gaaagtgc-
C.Por	ttagtgtc	ttagttcagagt...	594...	tcaacgttaaatatgaacat	AATTCATaTCTTcTAG	Gaaagtgc-
O.Cun	ctgtagtt	gtagttcagagt...	573...	tcaacgttaaatatgaacat	AATTCATaTCTTcTAG	GaAAGTgc-
C.Fam	ttagtggt	gtagtt-agagta...	593...	tcaacgttaaatatgaacat	AATTCATaTCTTcTAG	Gaaagtgc-
B.Tau	ttagtatt	gtagttcagagt...	517...	acatcgttaaatatgaacat	AATTCATaTCTTcTAG	Gaaagtgc-
E.Cab	ttagtatt	atagttcagagt...	599...	tcaacgttaaatatgaacat	AATTCATaTCTTcTAG	Gagagtgc-
S.Sus	ttagtatt	gtagttcagagt...	584...	tcaacgttaaatatgaacat	AATTCATaTCTTcTAG	Gaaagtgc-
L.Afr	ttagtatt	gtggctcagagt...	580...	tcaacttaaatatgaacat	AATTCATaTCTTcTAG	G-aagtgc-
	*	*	*	*	*	*

id=427500 gene=ENSG00000169045 name=HNRNPH1 segment=chr5_179047039_179047675_-1 type=IN

H.Sap	tggatcacg	gtaaagcctggtt...	443...	-----atttattttttttcaattgg-	TCTA-AAGAATGGtGATT	ttggtattatagtcttacccacaaaatccttttgcag	accaagtt
R.Mac	tggatcacg	gt-aagcctgttt...	369...	-----atttattttttttcaattgg-	TCTA-AAGAATGGtGATT	ttggtattatagtcttacccacaaaatccttttgcag	accaagtt
P.Tro	tggatcacg	gtaaagcctggtt...	441...	-----atttattttttttcaattgg-	TCTA-AAGAATGGtGATT	ttggtattatagtcttacccacaaaatccttttgcag	accaagtt
P.Abe	tggatcacg	gt-aagcctgttt...	370...	-----tattta-tttttttcaattgg-	TCTA-AAGAATGGtGATT	ttggtattatagtcttacccacaaaatccttttgcag	accaagtt
M.Mus	cggatatg	gt-gagtgatatt...	317...	-----gtttttttttttcaattgg-	TCTA-AAGAATGGtGATT	ttggtattatagtcttacccacaaaatccttttgcag	accaagtt
R.Nor	cggatatg	gt-gagtgttttt...	319...	-----ttgtttttttttcaattgg-	TCTA-AAGAATGGtAATT	ttggtattatagtcttacccacaaaatccttttgcag	accaagtt
C.Por	tggctacg	gt-aagcctttgt...	350...	-----ttatta-tttttttcaattgg-	TCTA-AAGAATGGtGATT	ttggtatgatagtcttacccacaaaatccttttgcag	accaagtt
O.Cun	tggatcacg	gt-aagcccggtt...	361...	gttttattaattatttttcaATTgg	TCTA-AAGAATGGtGATT	ttggtattatagtcttacccacaaaatccttttgcag	accaagtt
C.Fam	tggatatg	gt-aaggatgtct...	379...	-----ttttattttttttcaattgg-	TCTA-AAGAATGGtGATT	ttggtattatagtcttacccacaaaatccttttgcag	accaagtt
B.Tau	tggatcacg	gt-aagtgttttt...	363...	-----taatta-attttttcagttgg-	TCTA-AAGAATGGtGATT	ttggtattatagtcttacccacaaaatccttttgcag	accaagtt
E.Cab	tggatatg	gt-aagtgtgtat...	382...	-----attaactttttttcaattgg-	TCTA-AAGAATGGtGATT	ttggtattatagtcttacccacaaaatccttttgcag	accaagtt
S.Sus	tggatatg	gt-aagtgtatttt...	403...	-----tattta-tttttttcaattgg-	TCTA-AAGAATGGtGATT	ttggtattatagtcttacccacaaaatccttttgcag	accaagtt
L.Afr	tggatatg	gt-aagtatgggt...	358...	-----ttaattttttttcaattgg-	TCTA-AAGAATGGtGATT	ttggtattatagtcttacccacaaaatccttttgcag	accaagtt
	** ** *	** **		***** ** *	*****	*****	*****

id=427554 gene=ENSG00000169045 name=HNRNPH1 segment=chr5_179042597_179043126_-1 type=AN VIEW

Figure 153: CS=10.14



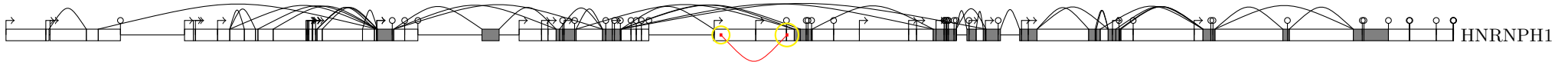
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R. Mac	tag gaaag	tgctttaagtccttttgtaagcttgggaa-	TGTATCCA	cgGAAA	gGATTTT	-tcataga-cggaatttcaga...241...--ttgaattcttgt	ataattct
P. Tro	tag gaaag	tgctttaagtccttttgtaagcttgggaa-	TGTATCCA	cgGAAA	gGATTTT	-tcataga-cggaatttcaga...241...taattgaa---ttgt	ataattct
P. Abe	tag gaaag	tgctttaagtccttttgtaaaccttgggaat	gTtaTCCA	cgGAAA	gGATTTT	ttcatagaccggaatttcca--...244...taattgaa---ttgt	ataattct
C. Jac	tag gaaag	tgctttaagtccttttgtaagcttgagaa-	TGTATCCA	cgGAAA	gGATTTT	-tcataga-cggaatttcaga...240...--ttgaatttttgt	ataattct
C. Por	tag gaaag	tgctttaagtccttttgtaagcttgggaa-	TGTATCCA	cgGAAA	gGATTTT	-tcataaa-cggaatttcaga...243...tatcttaa---ttgt	gtaattct
O. Cun	tag gaaag	tgctttaagcccttttgtaagcttgggaa-	TGTATCCA	cgGAAA	gGATTTT	-tcataga-cggaatttcaga...249...--ttaaagtattgt	ataattct
C. Fam	tag gaaag	tgctttaagcccttttgtaagcttgggaa-	TGTATCCA	cgGAAA	gGATTTT	-tcataga-cggaatttcaga...257...--ttaaattcttgt	gtaaattct
B. Tau	tag gaaag	tgctttaagtccttttgtaagcttgggaa-	TGTATCCA	cgGAAA	gGATTTT	-tcataga-cggaatttcaga...255...--tgtaattcttgt	ataattca
E. Cab	tag gagag	tgctttaagcccttttgtaagcttgggaa-	TGTATCCA	cgGAAA	gGATTTT	-tcataga-cggaatttcaga...250...--ttaaattcttgt	ataatttt
S. Sus	tag gaaag	tgctttaagcccttttgtaagcttgggaa-	TGTATCCA	cgGAAA	gGATTTT	-tcataga-cggaatttcaga...254...--ttaaattcttgt	gtaactca
O. Avi	tag gaaag	tgctttaagtccttttgtaagcttgggaa-	TGTATCCA	cgGAAA	gGATTTT	-tcataga-cggaatttcaga...255...--tataattcttgt	ataattca
L. Afr	tag gaagt	gcttttaagcccttttgtaagcttgggaa-	TGTATCCA	cgGAAA	gGATTTT	-tcataga-cggaatttcaga...252...--ttaaattcttgt	ataattct
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id=427502 gene=ENSG00000169045 name=HNRNPH1 segment=chr5_179046710_179047033_-1 type=AN

H. Sap	aAGAATCa	TTTCTGGGct	TGTG	atgttaaatattgccccctactggggttatttgccttgggttgaag	ggttggaa
R. Mac	aAGAATCa	TTTCTGGGct	TGTG	atgttaaatattgccccctactggggttatttgccttgggttgaag	ggttggaa
P. Tro	aAGAATCa	TTTCTGGGct	TGTG	atgttaaatattgccccctactggggttatttgccttgggttgaag	ggttggaa
P. Abe	aAGAATCa	TTTCTGGGct	TGTG	atgttaaatattgccccctactggggttatttgccttgggttgaag	ggttggaa
C. Jac	aAGAATCa	TTTCTGGGct	TGTG	atgttaaatattgccccctactggggttatttgccttgggttgaag	ggttggaa
C. Por	aAGAATCa	TTTCTGGGct	TGTG	atgttaaatattgccccctactggggttatttgccttgggttgaag	ggttggaa
O. Cun	aGAAATCa	TTTCTGGGct	TGTG	atgttaaatattgccccctactggggttatttgccttgggttgaag	ggttggaa
C. Fam	aAGAATCa	TTTCTGGGct	TGTG	atgttaaatattgccccctactggggttatttgccttgggttgaag	ggttggaa
B. Tau	aAGAATCa	TTTCTGGGct	TGTG	atgttaaatattgccccctactggggttatttgccttgggttgaag	ggttggaa
E. Cab	aAGAATCa	TTTCTGGGct	TGTG	atgttaaatattgccccctactggggttatttgccttgggttgaag	ggttggaa
S. Sus	aAGAATCa	TTTCTGGGct	TGTG	atgttaaatattgccccctactggggttatttgccttgggttgaag	ggttggaa
O. Avi	aAGAATCa	TTTCTGGGct	TGTG	atgttaaatattgccccctactggggttatttgccttgggttgaag	ggttggaa
L. Afr	aAGAATCa	TTTCTGGGct	TGTG	atgttaaatattgccccctactggggttatttgccttgggttgaag	ggttggaa
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id=427504 gene=ENSG00000169045 name=HNRNPH1 segment=chr5_179046409_179046469_-1 type=AN VIEW

Figure 154:



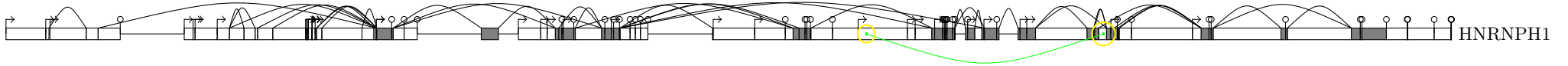
H. Sap	tag	gaaag	tgctttaagtcctttt	gtaagcttgggaatgta-	TCCA	cg	GAAA	gGA	TTTTTCATAG	a-cggaattccagaagt	gaa...235...taattgaa--ttgt	ataattct			
R. Mac	tag	gaaag	tgctttaagtcctttt	gtaagcttgggaatgta-	TCCA	cg	GAAA	gGA	TTTTTCATAG	a-cggaattccagaagt	gaa...235...--tgaattcctgt	ataattct			
P. Tro	tag	gaaag	tgctttaagtcctttt	gtaagcttgggaatgta-	TCCA	cg	GAAA	gGA	TTTTTCATAG	a-cggaattccagaagt	gaa...235...taattgaa--ttgt	ataattct			
P. Abe	tag	gaaag	tgctttaagtcctttt	gtaaacttgggaatgta	TCCA	cg	GAAA	GATT	TTTTTCATAG	accggaattccagaagt	gaa...237...taattgaa--ttgt	ataattct			
C. Jac	tag	gaaag	tgctttaagtcctttt	gtaagcttgagaatgta-	TCCA	cg	GAAA	gGA	TTTTTCATAG	a-cggaattccagaagt	gaa...234...--tgaatttttgt	ataattct			
M. Mus	tag	gaaag	tgctttaaggcctttt	gtaagcttgggaatgtaccacg-	GGA	AGGA			TTTTTCATAG	a-cggaattccagaagt	gaa...233...--taaagttcctgt	ataattct			
R. Nor	tag	gaaag	tgctttaaggcctttt	gtaagcttgggaatgtatccacg-	GGA	AGGA			TTTTTCATAG	a-cggaattccagaagt	gaa...230...attcaag--cctgt	ataattct			
C. Por	tag	gaaag	tgctttaagtcctttt	gtaagcttgggaatgta-	TCCA	CG	GAAA	gGA	TTTTTC	-ataaacggaattccagaag	----...241...tatcttaa--ttgt	gtaattct			
O. Cun	tag	gaaag	tgctttaagccctttt	gtaagcttgggaatgta-	TCCA	cg	GAAA	gGA	TTTTTCATAG	a-cggaattccagaagt	gaa...243...--tgaatttattgt	ataattct			
C. Fam	tag	gaaag	tgctttaagccctttt	gtaagcttgggaatgta-	TCCA	cg	GAAA	gGA	TTTTTCATAG	a-cggaattccagaagt	gaa...251...--ttaaattcctgt	gtaaattct			
B. Tau	tag	gaaag	tgctttaagtcctttt	gtaagcttgggaatgta-	TCCA	cg	GAAA	gGA	TTTTTCATAG	a-cggaattccagaagt	gaa...249...--tgtaatcctgt	ataattca			
E. Cab	tag	gagag	tgctttaagccctttt	gtaagcttgggaatgta-	TCCA	cg	GAAA	gGA	TTTTTCATAG	a-cggaattccagaagt	gaa...244...--ttaaattcctgt	ataatttt			
S. Sus	tag	gaaag	tgctttaagccctttt	gtaagcttgggaatgta-	TCCA	cg	GAAA	gGA	TTTTTCATAG	a-cggaattccagaagt	gaa...248...--ttaaattcctgt	gtaactca			
O. Avi	tag	gaaag	tgctttaagtcctttt	gtaagcttgggaatgta-	TCCA	cg	GAAA	gGA	TTTTTCATAG	a-cggaattccagaagt	gaa...249...--tataattcctgt	ataattca			
L. Afr	tag	gaagt	gctttaagccctttt	gtaagcttgggaatgta-	TCCA	cg	GAAA	gGA	TTTTTCATAG	a-cggaattccagaagt	gaa...246...--ttaaattcctgt	ataattct			
***	**		*****	*****	*		*	*****	*****	*	****	*****	*	***	*** *

id=427502 gene=ENSG00000169045 name=HNRNPH1 segment=chr5_179046710_179047033_-1 type=AN

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R. Mac	attcctgt	ataattctcaac...199...aagttctggttattttaag	CTAT	aa	GAAG	-AATCa	TTTCTGGg
P. Tro	tgaattgt	ataattctcaac...193...aaattctggttattttaag	CTAT	aa	GAAG	-AATCa	TTTCTGGg
P. Abe	tgaattgt	ataattctcaac...193...aaattctggttattttaag	CTAT	aa	GAAG	-AATCa	TTTCTGGg
C. Jac	atttttgt	ataattctcaac...199...aaattctggttattttaag	CTAT	aa	GAAG	-AATCa	TTTCTGGg
M. Mus	gttcttgt	ataattctatta...198...aaattctggttattttaag	CTAT	aa	GAAG	-AATCa	TTTCTggg
R. Nor	caagctgt	ataattctatta...194...aaattctggttattttaag	CTAT	aa	GAAG	-AATCa	TTTCTggg
C. Por	ttaattgt	gtaattctcgac...212...-----tggtttattttaagctataa	GAAG	-AATCa			TTTCTGGg
O. Cun	gttattgt	ataattctcaac...182...aaattctggttattttaag	CTAT	aa	GAAG	-AATCa	TTTCTGGg
C. Fam	attcctgt	gtaaatctcaac...193...aaattctggttattttaag	CTAT	aa	GAAG	-AATCa	TTTCTGGg
B. Tau	attcctgt	ataattcaacat...192...aaattctggttattttaag	CTAT	aa	GAAG	-AATCa	TTTCTGGg
E. Cab	attcctgt	ataattttctac...192...aaattctggttattttaag	CTAT	aa	GAAG	-AATCa	TTTCTGGg
S. Sus	attcctgt	gtaactcagcat...201...aaattctggttattttaag	CTAT	aa	GAAG	-AATCa	TTTCTGGg
O. Avi	attcctgt	ataattcaccat...193...aaattctggttattttaag	CTAT	aa	GAAG	-AATCa	TTTCTGGg
L. Afr	aattcctgt	ataattctgaac...186...aaattctggttattttaag	CTAT	aa	GAAG	-AATCa	TTTCTGGg
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id=427503 gene=ENSG00000169045 name=HNRNPH1 segment=chr5_179046470_179046709_-1 type=AN VIEW

Figure 155:



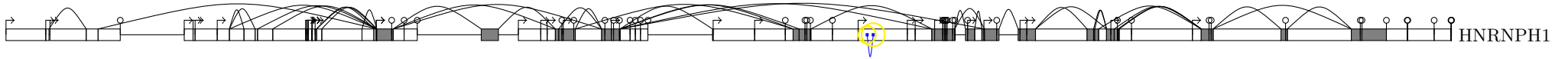
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R.Mac	agttgaaa	tgcaacaactttttcttgctgtatataaatattctgcata-	GTAT	taATAAG	caTAGCTT	tcAAGAAA	ttgtc	cacaaaagg	ttttatt...281...	ttttctgtaaa	gtttacat
P.Tro	agttgaaa	tgcaacaactttttcttgctgtatataaatattctgcata-	GTAT	taATAAG	caTAGCTT	tcAAGAAA	ttgtc	cacaaaagg	ttttatt...286...	ttttctataaa	gtttacat
P.Abe	agttgaaa	tgcaacaactttttcttgctgtatataaatattctgcata-	GTAT	taATAAG	caTAGCTT	tcAAGAAA	ttgtc	cacaaaagg	ttttatt...284...	ttttctataaa	gtttacat
C.Jac	agttgaaa	tgcaacaactttttcttgctgtatataaatattctgcata-	GTAT	taATAAG	caTAGCTT	tcAAGAAA	ttgtc	cacaaaagg	ttttatt...282...	ttttctataaa	gtatacat
M.Mus	agttgaaa	tgcaacaactttttcttgctg--tataaatattctgcata	GTAT	taATAAG	caTAGCTT	tcAAGAAA	ttgtc	cacaaaagg	ttttatt...271...	ttttctataaa	gtttaaat
R.Nor	agttgaaa	tgcaacaactttttcttgctg--tataaatattctgcata	GTAT	taATAAG	caTAGCTT	tcAAGAAA	ttgtc	cacaaaagg	ttttatt...286...	ttttctataaa	gtttaaat
C.Por	agttgaaa	tgcaacaactttttcttgctg--tataaatattctgcata	GTAT	taATAAG	caTAGCTT	tcAAGAAA	ttgtc	cacaaaagg	ttttatt...278...	tttcctgttaa	atttacat
O.Cun	agttgaaa	tgcaacaactttttcttgctg--tataaatattctgcata	GTAT	taATAAG	caTAGCTT	tcAAGAAA	ttgtc	cacaaaagg	ttttatt...277...	ttttctttaa	atttatat
C.Fam	agttgaaa	tgcaacaactttttcttgctg--tatatatattctgcata	GTAT	taATAAG	caTAGCTT	tcAAGAAA	ttgtc	cacaaaagg	ttttatt...275...	tctatatataaa	gtttacat
B.Tau	agttgaaa	tgcaacaactttttcttgctg--tataaatattctgcata	GTAT	taATAAG	caTAGCTT	tcAAGAAA	ttgtc	cacaaaagg	ttttatt...276...	ttcctcataaa	gtttacat
E.Cab	agttgaaa	tgcaacaactttttcttgctg--tataaatattctgcata	GTAT	taATAAG	caTAGCTT	tcAAGAAA	ttgtc	cacaaaagg	ttttatt...278...	ttttcctatgaa	gtttacat
S.Sus	agttgaaa	tgcaacaactttttcttgctg--tataaatattctgcata	GTAT	taATAAG	caTAGCTT	tcAAGAAA	ttgtc	cacaaaagg	ttttatt...277...	ttttctataaa	gtttacat
L.Afr	agttgaaa	tgcaacaactttttcttgctg--tataaatattctgcata	GTAT	taATAAG	caTAGCTT	tcAAGAAA	ttgtc	cacaaaagg	ttttatt...280...	ttttcctgtaa	gtttacat
*****	*****	*****	****	*****	*****	*****	***	*****	*	* * **	* ** **

id=427512 gene=ENSG00000169045 name=HNRNPH1 segment=chr5_179045517_179045900_-1 type=AN

H.Sap	gggtttgt	gtaaatatcactttagtgtcct----	TTTTTT	AAGCTA	acCTTGTATGC	cctttctctcatttcag	aacacaga
R.Mac	gggtttgt	gtaaatatcactttagtgtcct----	TTTTTT	AAGCTA	acCTTGTATGC	cctttctctcatttcag	aacacaga
P.Tro	gggtttgt	gtaaatatcactttagtgtcct----	TTTTTT	AAGCTA	acCTTGTATGC	cctttctctcatttcag	aacacaga
P.Abe	gggtttgt	gtaaatatcactttagtgtcct----	TTTTTT	AAGCTA	acCTTGTATGC	cctttctctcatttcag	aacacaga
C.Jac	gggtttgt	gtaaatatcactttagtgtcct----	TTTTTT	AAGCTA	acCTTGTATGC	cctttctctcatttcag	aacacaga
M.Mus	gggtttgt	gtaaatatcactttagtgtcct----	TTTTTT	AAGCTA	acCTTGTATGC	cctttctctcatttcag	aacacaga
R.Nor	gggtttgt	gtaaatatcactttagtgtcct----	TTTTTT	AAGCTA	acCTTGTATGC	cctttctctcatttcag	aacacaga
C.Por	gggtttgt	gtaaatatcactttagtgtcct----	TTTTTT	AAGCTA	acCTTGTATGC	cctttctctcatttcag	aacacaga
O.Cun	gggtttgt	gtaaatatcactttagtgtcct----	TTTTTT	AAGCTA	acCTTGTATGC	cctttctctcatttcag	aacacaga
C.Fam	gggtttgt	gtaaatatcactttagtgtcct----	TTTTTT	AAGCTA	acCTTGTATGC	cctttctctcatttcag	aacacaga
B.Tau	gggtttgt	gtaaatatcactttagtgtcct----	TTTTTT	AAGCTA	acCTTGTATGC	cctttctctcatttcag	aacacaga
E.Cab	gggtttgt	gtaaatatcactttagtgtcct----	TTTTTT	AAGCTA	acCTTGTATAC	cctttctctcatttcag	aacacaga
S.Sus	gggtttgt	gtaaatatcactttagtgtcct----	TTTTTT	AAGCTA	acCTTGTATGC	cctttctctcatttcag	aacacaga
L.Afr	gggtttgt	gtaaatatcactcctagtgtcctttttt	TTTTTT	AAGCTA	acCTTGTATGC	cctttctctcatttcag	aacacaga
*****	*****	*****	*****	*****	*****	*****	*****

id=427542 gene=ENSG00000169045 name=HNRNPH1 segment=chr5_179043960_179044021_-1 type=AN VIEW

Figure 156:



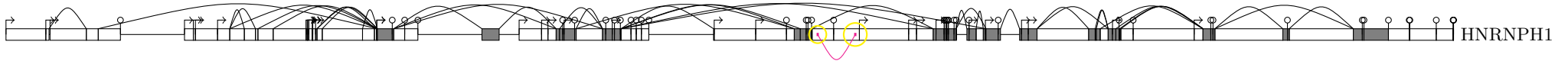
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R. Mac	agttgaaa	tgcaacaaactttttcttgctgtatataaatattctgcata-gtattaataa	GCATaGCTTT	caAGAAATtGTCAC	aaaagggttttattctctttg...274...tttttctgtaa	gtttacat
P. Tro	agttgaaa	tgcaacaaactttttcttgctgtatataaatattctgcata-gtattaataa	GCATaGCTTT	caAGAAATtGTCAC	aaaagggttttattctctttg...279...tttttctataaa	gtttacat
P. Abe	agttgaaa	tgcaacaaactttttcttgctgtatataaatattctgcata-gtattaataa	GCATaGCTTT	caAGAAATtGTCAC	aaaagggttttattctctttg...277...tttttctataaa	gtttacat
C. Jac	agttgaaa	tgcaacaaactttttcttgctgtatataaatattctgcata-gtattaataa	GCATaGCTTT	caAGAAATtGTCAC	aaaagggttttattctctttg...275...ttttcctataaa	gtatacat
M. Mus	agttgaaa	tgcaacaaactttttcttgctg--tataaatattctgcata-gtattaataa	GCATaGCTTT	caAGAAATtGTCAC	aaaagggttttattctctttg...264...tttttctataaa	gtttaaat
R. Nor	agttgaaa	tgcaacaaactttttcttgctg--tataaatattctgcata-gtattaataa	GCATaGCTTT	caAGAAATtGTCAC	aaaagggttttattctctttg...279...ttttcctataaa	gtttaaat
C. Por	agttgaaa	tgcaacaaac--tttcttgctg--tataaatattctgcata-gtattaataa	GCATaGCTTT	caAGAAATtGTCAC	aaaagggttttattctctttg...271...ttttcctgtaa	atttacat
O. Cun	agttgaaa	tgcaacaaactttttcttgctg--tataaatattctgcata-gtattaataa	GCATaGCTTT	caAGAAATtGTCAC	aaaagggttttattctctttg...270...tttttctataaa	atttatat
C. Fam	agttgaaa	tgcaacaaactttttcttgctg--tataatattctgcata-gtattaataa	GCATaGCTTT	caAGAAATtGTCAC	aaaagggttttattctctttg...268...tctatataaa	gtttacat
B. Tau	agttgaaa	tgcaacaaactttttcttgctg--tataaatattctgcata-gtattaataa	GCATaGCTTT	caAGAAATtGTCAC	aaaagggttttattctctttg...269...ttctcctataaa	gtttacat
E. Cab	agttgaaa	tgcaacaaactttttcttgctg--tataaatattctgcata-gtattaataa	GCATaGCTTT	caAGAAATtGTCAC	aaaagggttttattctctttg...271...ttttcctatgaa	gtttacat
S. Sus	agttgaaa	tgcaacaaactttttcttgctg--tataaatattctgcata-gtattaataa	GCATaGCTTT	caAGAAATtGTCAC	aaaagggttttattctctttg...270...tttttctataaa	gtttacat
L. Afr	agttgaaa	tgcaacaaactttttcttgctg--tataaatattctgcata-gtattaataa	GCATaGCTTT	caAGAAATtGTCAC	aaaagggttttattctctttg...273...ttttcctgtaa	gtttacat
*****	*****	*****	*****	*****	*****	*****

id=427512 gene=ENSG00000169045 name=HNRNPH1 segment=chr5_179045517_179045900_-1 type=AN

H. Sap	agttgaaa	tgcaacaaactt...66...agggtttattctctttgctt	GTGACTATTTTT	cattGAAGCATGCGc	-----ttacctatgctgattcct...229...tttttctataaa	gtttacat
R. Mac	agttgaaa	tgcaacaaactt...66...agggtttattctctttgctt	GTGACTATTTTT	cattGAAGCATGCGc	-----ttacctatgctgattcct...226...tttttctgtaa	gtttacat
P. Tro	agttgaaa	tgcaacaaactt...66...agggtttattctctttgctt	GTGACTATTTTT	cattGAAGCATGCGc	-----ttacctatgctgattcct...231...tttttctataaa	gtttacat
P. Abe	agttgaaa	tgcaacaaactt...66...agggtttattctctttgctt	GTGACTATTTTT	cattGAAGCATGCGc	-----ttacctatgctgattcct...229...tttttctataaa	gtttacat
C. Jac	agttgaaa	tgcaacaaactt...66...agggtttattctctttgctt	GTGACTATTTTT	cattGAAGCATGCGc	-----ttacctatgctgattcct...227...ttttcctataaa	gtatacat
M. Mus	agttgaaa	tgcaacaaactt...65...gggttttattctctttgctt	GTGACTATTTTT	cattGAAGCATGCGc	-----ttttttacctatgctgattcct...216...tttttctataaa	gtttaaat
R. Nor	agttgaaa	tgcaacaaactt...65...gggttttattctctttgctt	GTGACTATTTTT	cattGAAGCATGCGc	-----ttacctatgctgattcct...231...ttttcctataaa	gtttaaat
C. Por	agttgaaa	tgcaacaaactt...63...agggtttattctctttgctt	GTGACTATTTTT	cattGAAGCATGCGc	-----ttacctatgctgattcct...223...ttttcctgtaa	atttacat
O. Cun	agttgaaa	tgcaacaaactt...65...agggtttattctctttgctt	GTGACTATTTTT	cattGAAGCATGCGc	-----ttacctatgctgattcct...222...tttttctataaa	atttatat
C. Fam	agttgaaa	tgcaacaaactt...65...agggtttattctctttgctt	GTGACTATTTTT	cattGAAGCATGCGc	-----ttacctatgctgattcct...220...tctatataaa	gtttacat
B. Tau	agttgaaa	tgcaacaaactt...65...agggtttattctctttgctt	GTGACTATTTTT	cattGAAGCATGCGc	-----ttacctatgctgattcct...221...ttctcctataaa	gtttacat
E. Cab	agttgaaa	tgcaacaaactt...65...agggtttattctctttgctt	GTGACTATTTTT	cattGAAGCATGCGc	-----ttacctatgctgattcct...223...ttttcctatgaa	gtttacat
S. Sus	agttgaaa	tgcaacaaactt...65...agggtttattctctttgctt	GTGACTATTTTT	cattGAAGCATGCGc	-----ttacctatgctgattcct...222...tttttctataaa	gtttacat
L. Afr	agttgaaa	tgcaacaaactt...65...agggtttattctctttgctt	GTGACTATTTTT	cattGAAGCATGCGc	-----ttacctatgctgattcct...225...ttttcctgtaa	gtttacat
*****	*****	*****	*****	*****	*****	*****

id=427512 gene=ENSG00000169045 name=HNRNPH1 segment=chr5_179045517_179045900_-1 type=AN VIEW

Figure 157:



H. Sap	gggc	acag	gtggggat-ggatggtt-ggttggata	-----	TGTCAC	TTTTCTT	TATGGTAA	acaatta	-----	aatccatattctc	-----	...91...	caactaaattt	taggtttg	
R. Mac	gggc	acag	gtggggat-ggatggtt-ggttggata	-----	TGTCAC	TTTTCTT	TATGGTAA	acaatta	-----	aatccatattctc	-----	...96...	caactaaattt	taggttta	
P. Tro	gggc	acag	gtggggat-ggatggtt-ggttggata	-----	TGTCAC	TTTTCTT	TATGGTAA	acaatta	-----	aatccatattctc	-----	...96...	caactaaattt	taggttta	
P. Abe	gggc	acag	gtggggatgggatggttgggttggata	-----	TGTCAC	TTTTCTT	TATGGTAA	ACAATA	TTAA	-----	atccatattctc	tctgctta	...91...	caactaaattt	taggttta
C. Jac	gggc	acag	gtggggat-ggatggtt-ggttggata	-----	TGTCAC	TTTTCTT	TATGGTAA	ACAATA	TTAA	-----	atccatattctc	tctgctta	...88...	caactaaattt	taggttta
M. Mus	gggc	acag	gtggggat-ggatggtt-ggttggata	-----	TGTCAC	TTTTCTT	TATGGTAA	acaatta	-----	aatccatattctc	-----	...93...	caactaaattt	taggttta	
R. Nor	gggc	acag	gtggggat-ggatggtt-ggttggat	atgtcacttttcttatggtaa	caaa	TTAA	ATCCATA	TCTCTC	TGCTT	agaaggaggaa	aaaccat	-----	...65...	caactaaattt	taggttta
C. Por	gggc	acag	gtggggat-ggatggtt-ggttggata	-----	TGTCAC	TTTTCTT	TATGGTAA	acaatta	-----	aatccatattctc	-----	...101...	caactaaattt	taggttta	
O. Cun	gggc	acag	g-----	TGGGGATGG	atGGTGGG	GGAT	TGTCAC	TTTTCTT	TATGGTAA	acaatta	-----	...98...	caactaaattt	taggttta	
C. Fam	gggc	acag	gtggggat-ggatggttgg-ttggatt	-----	TGTCAC	TTTTCTT	TATGGTAA	acaatta	-----	aatccatattctc	-----	...90...	gagatgaaagt	taggttta	
B. Tau	gggc	acag	gtggggat-ggatggttgg-ttggatt	-----	TGTCAC	TTTTCTT	TATGGTAA	acaatta	-----	atccatattctc	tctgctta	...93...	caactaaattt	taggttta	
E. Cab	gggc	acag	gtggggat-ggatggttgg-ttggatt	-----	TGTCAC	TTTTCTT	TATGGTAA	acaatta	-----	aatccatattctc	-----	...102...	caactaaattt	taggttta	
S. Sus	gggc	acag	gtggggat-ggatggttgg-ttggatt	-----	TGTCAC	TTTTCTT	TATGGTAA	acaatta	-----	aatccatattctc	-----	...95...	caactaaattt	taggttta	
O. Avi	gggc	acag	gtggggat-ggatggttgg-ttggatt	-----	TGTCAC	TTTTCTT	TATGGTAA	acaatta	-----	aatccatattctc	-----	...100...	caactaaattt	taggttta	
L. Afr	gggc	acag	gtggggat-ggatggtt-ggttggata	-----	TGTCAC	TTTTCTT	TATGGTAA	acaatta	-----	aatccatattctc	-----	...94...	caactaaattt	taggttta	
****	****	*			**	*	****	*	*	*			*	****	**

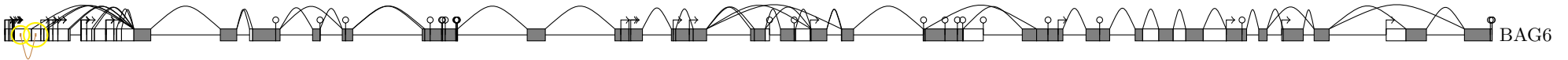
id=427510 gene=ENSG00000169045 name=HNRNPH1 segment=chr5_179046102_179046269_-1 type=AN

H. Sap	ctaaatt	taggttt	gaaat...120...	-----	ccacctag	-aataa	taata	TTACCATAAG	-AAAA	GTGATA	-----			
R. Mac	ctaaatt	taggttt	gaaat...120...	-----	ccacctag	-agtaa	taata	TTACCATAAG	-AAAA	GTGATA	-----			
P. Tro	ctaaatt	taggttt	gaaat...120...	-----	ccacctag	-aataa	taata	TTACCATAAG	-AAAA	GTGATA	-----			
P. Abe	ctaaatt	taggttt	gaaat...116...	-----	aacaccc	acctagg	gagta	TTAATGTT	ACCATAAG	AAAA	GTGATA			
C. Jac	ctaaatt	taggttt	gaaat...108...	-----	aataaac	accac	ct---	agtaaa	TTAATAT	TACCATAAG	-AAA	ttGTGATA		
M. Mus	ttaaact	taggctt	taaaa...126...	-----	accat	at---	aggaa	at	TTACCATAAG	-AAAA	GTGATA			
R. Nor	ttaaatt	taggttt	taaga...49...	-----	cttatta	aacccc	-----	aatcaata	-GAGTt	GAG-AGA	C	TATGGC	TTAA	aaaatta
C. Por	ctgaatt	gaggttt	taaaa...121...	-----	acc	caact---	agtaa	at	TTACCATAAG	-AAAA	GTGATA			
O. Cun	ctcaatt	taggttt	taaaa...114...	-----	acc	catct---	agtaa	at	TTACCATAAG	-AAAA	GTGATA	TTTTCTG	ATCTT	TTTTTA
C. Fam	tgaagt	taggttt	taaaa...122...	-----	acc	caact---	agtaa	at	TTACCATAAG	-AAAA	GTGATA			
B. Tau	ttaaatt	tagattt	taaaa...117...	-----	aataa	accac	ct---	agtaaa	TTAATAT	TACCATAAG	-AAAA	GTGATA		
E. Cab	tgaatt	taaaatt	gtccc...118...	-----	acc	caact---	agtaa	at	TTACCATAAG	-AAAA	GTGATA			
S. Sus	ttaaatt	tagattt	tgcaa...127...	-----	atcc	caact---	agtaa	at	TTACCATAAG	-AAAA	GTGATA			
O. Avi	ttaaatt	tagattt	tgaaa...123...	-----	acc	caact---	agtaa	at	TTACCATAAG	-AAAA	GTGATA			
L. Afr	ttaaatt	tggctt	taaaa...121...	-----	acc	caact---	agtaa	at	TTACCATAAG	-AAAA	GTGATA			
	** **	**			**		*** **	*	** * * * *					

H. Sap	-----	ctttctgatctgtgtttt	taagttgaaa	tgcaacaa		
R. Mac	-----	ctttctgatctgtgtttt	taagttgaaa	tgcaacaa		
P. Tro	-----	ctttctgatctgtgtttt	taagttgaaa	tgcaacaa		
P. Abe	-----	ctttctgatctgtgtttt	taagttgaaa	tgcaacaa		
C. Jac	-----	ctttctgatctgtgtttt	taagttgaaa	tgcaacaa		
M. Mus	-----	ctttctgatctgtgtttt	taagttgaaa	tgcaacaa		
R. Nor	ctacaatcctgtctttagctgtaataacacc	catagga	atattccataagacaatgtgata	ctttctgatctgtgtttt	taagttgaaa	tgcaacaa
C. Por	-----	ctttctgatctgtgtttt	taagttgaaa	tgcaacaa		
O. Cun	-----	-----	agttgaaa	tgcaacaa		
C. Fam	-----	ctttctgatctgtgtttt	taagttgaaa	tgcaacaa		
B. Tau	-----	ctttctgatctgtgtttt	taagttgaaa	tgcaacaa		
E. Cab	-----	ctttctgatctgtgtttt	taagttgaaa	tgcaacaa		
S. Sus	-----	ctttctgatctgtgtttt	taagttgaaa	tgcaacaa		
O. Avi	-----	ctttctgatctgtgtttt	taagttgaaa	tgcaacaa		
L. Afr	-----	ctttctgatctgtgtttt	taagttgaaa	tgcaacaa		
		*****	*****			

id=427511 gene=ENSG00000169045 name=HNRNPH1 segment=chr5_179045901_179046101_-1 type=AN VIEW

Figure 158: CS=4.5



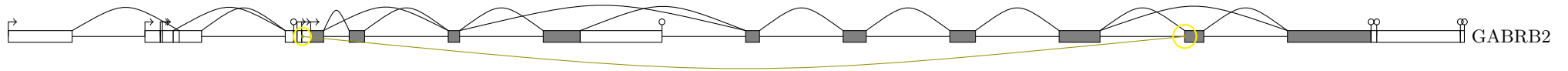
H. Sap	gtccc	ccg	gg-----cgacagcgggtggcgggtcctcctcg	GGTGCTCGGCTCCCTCCCA	-----cctaggccggccccggcccg...47...tgccccacaaaa	gtaaagct
R. Mac	gtccc	ccg	gg-----cgacggcggcggcgggtcctcctgt	GGTGCTCGGCTCCCTCCCA	-----cctaggccggccccggcccg...47...tgccccacaaaa	gtaaagct
P. Tro	gtccc	ccg	gg-----cgacagcgggtggcgggtcctcctcg	GGTGCTCGGCTCCCTCCCA	-----cctaggccggccccggcccg...47...tgccccacaaaa	gtaaagct
P. Abe	gtccc	ctg	gg-----cgacggcgggtggcgggtcctcctcg	GGTGCTCGGCTCCCTCCCA	-----cctaggccggccccggcccg...47...tgccccacaaaa	gtaaagct
C. Jac	gtccc	ctg	gg-----cgacggcggcggcgggtcctcctcggttc	TCGGCTCCCTCCCA	-----cctaggccggccccggcccg...43...tgccccacaaaa	gtaaagct
M. Mus	gtccc	ccg	ggcgacagcggcggcggcgggtcctcctcggttg	TCGGCTCCCTCCCATCTCggCCGG	ccccggcctctcgcccc...38...tgccccacgaaa	gtaaatcg
R. Nor	gtccc	ccg	gg-----cgacggcggcggcgggtcctcctcggttg	TCGGCTCCCTCCCA	-----tctaggccggccccggcccg...48...tgccccacgaaa	gtaaatcg
C. Por	gtccg	ccg	gg-----cgac-gcggcggcgggtcctcatcag	GGTGCTCGGCTCCCTCCCA	-----ttaggcggccccctgcccg...47...tgtccttcgaaa	gtaaatct
O. Cun	ggtcc	ccg	gg-----cgacgacggcggcgggtcctcctcg	GGTGCTCGGCTCCCTCCCA	-----tctaggccggccccggcccg...47...tgccccacaaaa	gtaacgct
C. Fam	gcccc	ccg	gg-----cgacggtggcgggtgggtcctcctcg	GGTGCTCGGCTCCCTCCCA	-----tccaggccggccccggcccg...47...tcccaacaaaa	gtaaaact
B. Tau	gtccc	ccg	gg-----cgacggcgggtggcggcgggtccttcgg	GGTGCTCGGCTCCCTCCCA	-----tctaggccggccccggcccg...47...agccccactaaa	gtaaagct
S. Sus	gtacc	ccg	gg-----agacggtggcggcggcgggtccttcgg	GGTGCTCGGCTCCCTCCCA	-----tctaggccggccccggcccg...45...tgccctacaaaa	gtaaagct
O. Avi	gtccc	ccg	gg-----cgacggcgggtggcggcgggtccttcgg	GGTGCTCGGCTCCCTCCCA	-----tctaggccggccccggcccg...47...agccccacaaaa	gtaaagct
L. Afr	gtccc	ccg	gg-----cgacggcgtggcggatcctcctcg	GGTGCTCGGCTCCCTCCCA	-----tctaggccggccccggcccg...49...tgccccacaaaa	ggaaagtt
	* * *	** **	** * ** * ** *	***** **	* ** * ** *	** * ** *

id=497950 gene=ENSG00000204463 name=BAG6 segment=chr6_31620290_31620412_-1 type=EN

H. Sap	ccacaaaa	gtaaagccttggggacc	TGGGGGAGCCGGaaGTATC	-----gcttcgagat-----	ccccaaatactatcggggaaa	cggaaagt
R. Mac	ccacaaaa	gtaaagccttggggacc	TGGGGGAGCCGGaaGTATC	-----gcctcgagat-----	ccccaaatactatc-gggaaa	cggaaagt
P. Tro	ccacaaaa	gtaaagccttggggacc	TGGGGGAGCCGGaaGTATC	-----gcttcgagat-----	ccccaaatactatcggggaaa	cggaaagt
P. Abe	ccacaaaa	gtaaagccttggggacc	TGGGGGAGCCGGaaGTATC	-----gcctcgagat-----	ccccaaatactatcggggaaa	cggaaagt
C. Jac	ccacaaaa	gtaaagccttggggacc	TGGGGGAGCCGG	-----aagtatcgcttgagat-----	ccccaaatactatcgtggaaa	cggaaagt
M. Mus	ccacgaaa	gtaaa-----	TCGGggGAGAcTGGGGGAGCCGG	aagtaccgctcgagat	ccccaaatactatcggggaaa	cggaaagt
R. Nor	ccacgaaa	gtaaatcgggggagac	T-GGGGGAGCCGG	-----aagtaccgctcgagat-----	ccccaaatactatcggggaaa	cggaaagt
C. Por	cttcgaaa	gtaaatccttcgggagcc	TGGGGGAGCCGGaaGTACC	-----gccttagagag-----	ctccaaatactatcggggaaa	cggaaagt
O. Cun	ccacaaaa	gtaacgcttggggacc	T-GGGGGAGCCGGaaGTACC	-----gcctcgtgatt-----	ccccagatactatcggggaaa	cggaaagt
C. Fam	caacaaaa	gtaaaacttcgggacc	TGGGGGAGCCGGAagTACC	-----gccttcgagat-----	ccccaaatactatcggggaaa	cggaaagt
B. Tau	ccactaaa	gtaaagccttggggacc	TGGGGGAGCCGGaaGTACC	-----gcctcacgagat-----	ccccaaagactatcggggaaa	cggaaagt
S. Sus	ctacaaaa	gtaaagccttggggacc	T-GGGGGAGCCGGaaGTACC	-----gcctcgcgagat-----	ccccaaatactatcggggaaa	cggaaagt
O. Avi	ccacaaaa	gtaaagccttggggacc	TGGGGGAGCCGGaaGTACC	-----gcctcgcgagat-----	ccccaaatactatcggggaaa	cggaaagt
L. Afr	ccacaaaa	ggaaagttcggggacc	TGGGGGAGCCGGaaGTACC	-----gccttcgagat-----	ccccaaatactatcggggaaa	cggaaagt
	* * ** *	** **	* ** * ** * *	** * ** *	* ** * ** * ** *	*****

id=497951 gene=ENSG00000204463 name=BAG6 segment=chr6_31620223_31620289_-1 type=AN VIEW

Figure 159: CS=4.2



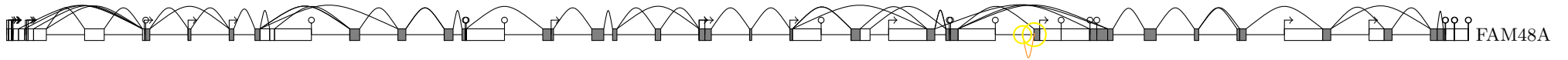
H.Sap	tgcgcctc	acattagaattactgcaCTGGGcAGACT	AAGTtggga
R.Mac	tgcgcctc	acattagaattactgcaCTGGGcAGACT	AAGTtggga
P.Tro	tgcgcctc	acattagaattactgcaCTGGGcAGACT	AAGTtggga
P.Abe	tgcgcctc	acattagaattactgcaCTGGGcAGACT	AAGTtggga
C.Jac	tgcgcctc	acattagaattactgcaCTGGGcAGACT	AAGTtggga
M.Mus	tgcgcctc	acattagaattactgcaCTGGGcAGACT	AAGTtggga
R.Nor	tgcgcctc	acattagaattactgcaCTGGGcAGACT	AAGTtggga
C.Por	tgcgcctc	acagtagaattactgcaCTGGGcAGACT	AAGTtggga
O.Cun	tgcgcctc	ccattagaattactgcaCTGGGcAGACT	AAGTtggga
C.Fam	tgcgcctc	acattagaattactgcaCTGGGcAGACT	AAGTtggga
F.Cat	tgcgcctc	acattagaattactgcaCTGGGcAGACT	AAGTtggga
B.Tau	tgcgcctc	acattagaattactgcaCTGGGcAGACT	AAGTtggga
E.Cab	tgcgcctc	acattagaattactgcaCTGGGcAGACT	AAGTtggga
S.Sus	tgcgcctc	acattagaattactgcaCTGGGcAGACT	AAGTtggga
*****	*	** *****	*****

id=583199 gene=ENSG00000145864 name=GABRB2 segment=chr5.160973704.160973731.-1 type=EN

H.Sap	tcaacaag	gtaaattcagag...4355...acttaattagcacattctct-	ACTTtGTCTTCCAG	atTTTTta
R.Mac	tcaacaag	gtaaattcaaag...4366...acttaattagcacattctct-	ACTTtGTCTTCCAG	atTTTTta
P.Tro	tcaacaag	gtaaattcagag...4362...acttaattagcacattctct-	ACTTtGTCTTCCAG	atTTTTta
P.Abe	tcaacaag	gtaaattcggag...4348...acttaattagcacggttctct-	ACTTtGTCTTCCAG	atTTTTta
C.Jac	tcaacaag	gtaaattcagag...4272...atTTaattagTAcattctct-	ACTTtGTCTTCCAG	atTTTTta
M.Mus	tcaacaag	gtacatttacac...4283...-cttaattagcacattTTTT	ACTTtGTCTTCCAG	atgTTTTa
R.Nor	tcaacaag	gtacacttacag...4267...acttaattagcacattttct-	ACTTtGTCTTCCAG	atTTTTta
C.Por	tcaacaag	gtacattcagag...4460...acttaattagTAcattctct-	ACTTtGTCTTCCAG	atTTTTta
O.Cun	tcaacaag	gtaaattctgag...4943...aacttattagcacattctct-	ACTTtGTCTTCCAG	atTTTTta
C.Fam	tcaacaag	gtaaattcagag...4453...acttaattagcacattctct-	ACTTtGTCTTCCAG	atTTTTta
F.Cat	tcaacaag	gtaaattcagag...4943...acttaattagcacattctct-	ACTTtGTCTTCCAG	atTTTTta
B.Tau	tcaacaag	gtaggttcaaag...4274...acttaattagcacattctct-	ACTTtGTCTTCCAG	atTTTTta
E.Cab	tcaacaag	gtaaattcagag...4450...acttaattagcacattttct-	ACTTtGTCTTCCAG	atTTTTta
S.Sus	tcaacaag	gtaagttcagag...4481...-cttaattagcacattctTTT	ACTTtGTCTTCCAG	atTTTTta
*****	***	* * *	* *	** *****

id=583217 gene=ENSG00000145864 name=GABRB2 segment=chr5.160753489.160757889.-1 type=IN VIEW

Figure 160: CS=9.8



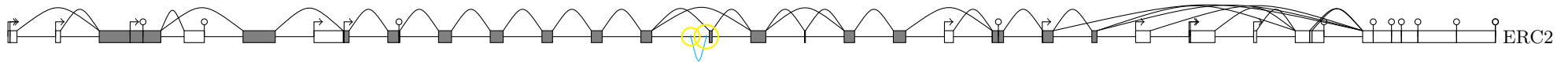
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R.Mac	acactcct	acactcttttat...315...gtgtaat	tttttctgccttct	TGTTTTGCA	AAAGAAA	---aatatataa	atatttctgaaa...113...ttctttctgcag	gacatgaa
P.Tro	acactcct	acactcttttat...310...gtgtaat	tttttctgccttct	TGTTTTGCA	AAAGAAA	---aatatataa	atatttctgaaa...113...ttctttctgcag	gacatgaa
P.Abe	acactcct	acactcttttat...310...gtgtaat	tttttctgccttct	TGTTTTGCA	AAAGAAA	---aatatataa	atatttctgaaa...113...ttctttctgcag	gacatgaa
C.Jac	acactcct	acactcttttat...307...gtgtaat	tttttctgccttct	TGTTTTGCA	AAAGAAA	---aatatataa	atatttctgaaa...114...ttctttctgcag	gacatgaa
M.Mus	gcatgcct	acactgctgtaa...297...gtgtaat	tttttctgccttct	TGTTTTGCA	AAAGA	---aaaataa	atatttctgaa...118...ctctttctgcag	gacatgaa
R.Nor	gcacgtct	acacttctgtaa...303...gtgtaat	tttttctgccttct	TGTTTTGCA	AAAGAAA	---aataa	atatttctgaaa...110...ttctttctgcag	gacatgaa
O.Cun	acactcct	acactcttttct...312...gtgtaat	tttttctgccttct	TGTTTTGCA	AAAGAAA	---aatatataa	atatttctgaaa...113...ttctttctgcag	gacatgaa
C.Fam	acactcct	acactcttaaaa...310...gtgtaat	tttttctgccttct	TGTTTTGCA	AAAGAAA	aa--tttataa	atattcctggaa...113...ttctttctgcag	gacatgaa
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O.Avi	atacctgt	acactctccta...309...gtgtaat	tttttctgccttct	TGTTTTGCA	AAAGAAA	aaa--tttataa	atattcctgaa...117...ttctttctgcag	gacatgaa
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P.Tro	acactcct	acactcttttat...459...ggacatt	cacatttctttcc	TTTCTTT	TGCAG	GACAtgaa
P.Abe	acactcct	acactcttttat...459...ggacatt	cacatttctttcc	TTTCTTT	TGCAG	GACAtgaa
C.Jac	acactcct	acactcttttat...457...ggacatt	cacatttctttcc	TTTCTTT	TGCAG	GACAtgaa
M.Mus	gcatgcct	acactgctgtaa...451...--acatt	cacctctctctcct	TCTTT	TGCAG	GACAtgaa
R.Nor	gcacgtct	acacttctgtaa...449...ggacatt	cacatctctctcc	TTTCTTT	TGCAG	GACAtgaa
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E.Cab	acactcct	acactcttataa...461...ggacatt	cacatttctttcc	TTTCTTT	TGCAG	GACAtgaa
S.Sus	acaccctt	acactccataaa...465...ggacatt	cacatttctttcc	TTTCTTT	TGCAG	GACAtgaa
O.Avi	atacctgt	acactctccta...462...ggacatt	cacatttctttcc	TTTCTTT	TGCAG	GACAtgaa
L.Afr	gcactcct	acactcttataa...459...ggacatt	cacatttctttcc	TTTCTTT	TGCAG	GACAtgaa
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id=756707 gene=ENSG00000102710 name=FAM48A segment=chr13_37597182_37597685_-1 type=IN VIEW

Figure 161:



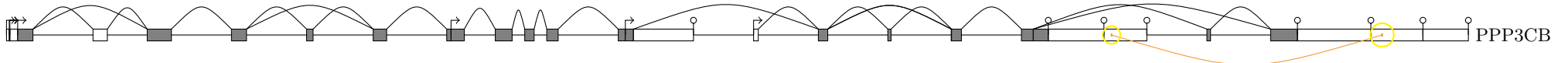
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R. Mac	taaaaaag	gtaagtgaagtc...	3767...	tttcatgggtattttaact	GAGAAAGG	AAAG	taacacaaaccttaatttc...	207...	tttccaatgtag	caagctga
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P. Abe	taaaaaag	gtaagtgaagtc...	3752...	tttcatgggtattttaact	GAGAAAGG	AAAG	taacacaaaccttaatttc...	207...	tttccaatgtag	caagctga
C. Jac	taaaaaag	gtaagtgaagtc...	3722...	tttcatgggtattttaact	GAGAAAGG	AAAG	taacacaaaccttaatttc...	207...	tttccaatgtag	caagctga
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C. Por	taaaaaag	gtaagtgaagtc...	3771...	tttcatgggtattttaact	GAGAAAGG	AAAG	taacacaaaccttaatttc...	208...	tttccaatgtag	caagctga
O. Cun	taaaaaag	gtaagtgaagtc...	3704...	tttcatgggtattttaact	GAGAAAGG	AAAG	taacacaaaccttaatttc...	205...	tttccaatgtag	caagctga
C. Fam	tgaaaaag	gtaagtgaagtc...	3714...	tttcatgggtattttaact	GAGAAAGG	AAAG	taacacaaaccttaatttc...	207...	tttccaatgtag	caagctga
F. Cat	taaaaaag	gtaagtgaagtc...	2970...	tttcatgggtattttaact	GAGAAAGG	AAAG	taacacaaaccttaatttc...	207...	tttccaatgtag	caagctga
B. Tau	taaaaaag	gtaagtgaatc...	3809...	tttcatgggtattttaact	GAGAAAGG	AAAG	taacacaaaccttaatttc...	207...	tttccaatgtag	caagctga
E. Cab	taaaaaag	gtaagcgaagtc...	3795...	tttcatgggtattttaact	GAGAAAGG	AAAG	taacacaaaccttaatttc...	207...	tttccaatgtag	caagctga
S. Sus	taaagaag	gtaagtgaatc...	3993...	tttcatgggtattttaact	GAGAAAGG	AAAG	taacacaaaccttaatttc...	206...	tttccaatgtag	caagctga
L. Afr	taaaaaag	gtaagtgaagtc...	3727...	tttcatgggtattttaact	GAGAAAGG	AAAG	taacacaaaccttaatttc...	208...	tttccaatgtag	caagctga
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id=162867 gene=ENSG00000187672 name=ERC2 segment=chr3_56037163_56041208_-1 type=IN

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P. Tro	taaaaaag	gtaagtgaagtc...	3962...	ctaagctgtttttctggat	CTTTCCTT	TTTC	cctgtctgtgcctcaatgcctccccactttgcaatgtag	caagctga
P. Abe	taaaaaag	gtaagtgaagtc...	3951...	ctaagctgtttttctggat	CTTTCCTT	TTTC	cctgtctgtgcctcaatgcctccccactttgcaatgtag	caagctga
C. Jac	taaaaaag	gtaagtgaagtc...	3921...	ctaagctgtttttctggat	CTTTCCTT	TTTC	cctgtctgtgcctcaatgcctccccactttgcaatgtag	caagctga
M. Mus	taaaaaag	gtaagcgaagtc...	4175...	ctaagctgtttttctggat	CTTTCCTT	TTTC	cctgtctgtgcctcaatgcctccccactttgcaatgtag	caagctga
C. Por	taaaaaag	gtaagtgaagtc...	3971...	ctaagctgtttttctggat	CTTTCCTT	TTTC	cctgtatgtgcttcaatgcctgcccaactttgcaatgtag	caagctga
O. Cun	taaaaaag	gtaagtgaagtc...	3901...	ctaagctgtttttctggat	CTTTCCTT	TTTC	cccgtctgtgctcaatgcctccccactttgcaatgtag	caagctga
C. Fam	tgaaaaag	gtaagtgaagtc...	3913...	ctaactgtttttctggat	CTTTCCTT	TTTC	cctgtctgtgcttcaatgcctccccactttgcaatgtag	caagctga
F. Cat	taaaaaag	gtaagtgaagtc...	3169...	ctaagctgtttttctggat	CTTTCCTT	TTTC	cctgtctgtgcttcaatgcctccccactttgcaatgtag	caagctga
B. Tau	taaaaaag	gtaagtgaatc...	4008...	ctaagctgtttttctggat	CTTTCCTT	TTTC	cctgtctgtgcttcaatgcctccccactttgcaatgtag	caagctga
E. Cab	taaaaaag	gtaagcgaagtc...	3994...	ctaagctgtttttctggat	CTTTCCTT	TTTC	cctgtctgtgcttcaatgcctccccactttgcaatgtag	caagctga
S. Sus	taaagaag	gtaagtgaatc...	4191...	ctaagctgtttttctggat	CTTTCCTT	TTTC	cctgtctgtgcttcaatgcctccccactttgcaatgtag	caagctga
L. Afr	taaaaaag	gtaagtgaagtc...	3927...	ctaagctgtttttctggat	CTTTCCTT	TTTC	cctgtctgtgcttcaatgcctccccactttgcaatgtag	caagctga
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id=162867 gene=ENSG00000187672 name=ERC2 segment=chr3_56037163_56041208_-1 type=IN VIEW

Figure 162:



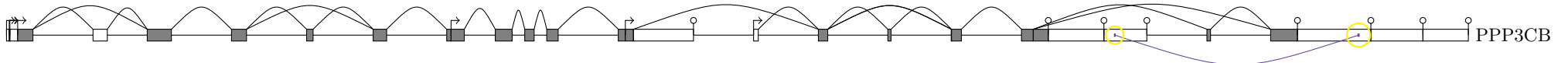
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R. Mac	tctatgta	taattaactgctgtaaacatgctgtttccttcctctgcagatgtagc	TGCTTTCCTAAATCTG	tctgtctttccttaggttag-...262...	gcattcctgtaa	tctggctc
P. Tro	tctatgta	taattaactgctgtaaacatgctgtttccttcctctgcagatgtagc	TGCTTTCCTAAATCTG	tctgtctttccttaggttag-...262...	gcattcctgtaa	tctggctc
P. Abe	tctatgta	taattaactgctgtaaacatgctgtttccttcctctgcagatgtagc	TGCTTTCCTAAATCTG	tctgtctttccttaggttag-...262...	gcattcctgtaa	tctggctc
C. Jac	tctatgta	taattaactgctgtaaacatgctgtttccttcctctgcagatgtagc	TGCTTTCCTAAATCTG	tctgtctttccttaggttag-...262...	gcattcctgtaa	tctggctc
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B. Tau	tctatgta	taattgactgctgtaaacatgctgtttccttcctctgcagatgtagc	TGCTTTCCTAAATCTG	tctgtctttccttaggttag-...261...	gcattcctgtaa	tctggctc
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id=820718 gene=ENSG00000107758 name=PPP3CB segment=chr10.75203538.75203894_-1 type=AN

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P. Abe	tttaatgc	aaaggaaatfff...46...-aatggttctgttcaatcatt	CAGATgTTAGt	GGAAGCA	taaaagtcaagactgcatgt...305...	gccgctgctcct	atctctgt
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id=820724 gene=ENSG00000107758 name=PPP3CB segment=chr10.75196564.75196996_-1 type=E3 VIEW

Figure 165:



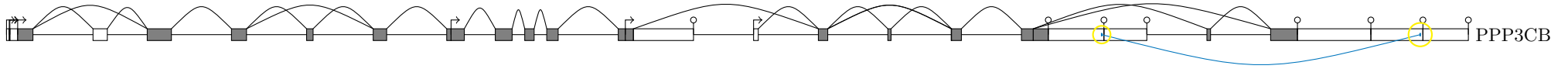
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R. Mac	tctatgta	taattaactgtc...43...-taaatctgctgctctttctt	TAGGtTAGCTGTATGTcTGTA	aaagtatggtcaattaatt-...229...gcattcctgtaa	tctggctc
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C. Jac	caaatgga	cagatcaccgga...804...atagacctatgatgtacagg	TACGACATGTATAGGTTACCTA	gatggttatgagaatttttag...69...atgttttaatgc	aaaggaaa
C. Por	caaatgga	caaatcaccgga...799...atagacctatgatgtacagg	TACAACATGTATAGGTTACCTA	gatggttatgagacatttttag...70...atgttttaatgc	aaaggaaa
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id=820723 gene=ENSG00000107758 name=PPP3CB segment=chr10.75196997.75197955_-1 type=E3 VIEW

Figure 166:



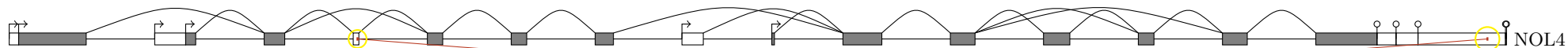
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R. Mac	gcagctga	cctagacaggg...400...	ggtaaatgatgccaaagttt	GTTTcTGTGgTGT	tgcaaatgttctatgta	taattaac
P. Tro	gcagctga	cctagacaggg...398...	ggtaaatgatgccaaagttt	GTTTcTGTGgTGT	tgcaaatgttctatgta	taattaac
P. Abe	gcagctga	cctagacaggg...400...	ggtaaatgatgccaaagttt	GTTTcTGTGgTGT	tgcaaatgttctatgta	taattaac
C. Jac	gcagctga	catagacaggg...390...	ggtaaatgatgccaaagttt	GTTTcTGTGgTGT	tgcaaatgttctatgta	taattaac
C. Por	gcagctga	caccagcaggg...405...	ggtaaatgatgccaaagttt	GTTTcTGTGgTGT	tgcaaatgttctatgta	taatcgac
O. Cun	gcagctga	cataggcaggg...399...	ggtaaatgatgccaaagttt	GTTTcTGTGgTGT	tgcaaatgttctatgta	taattgac
C. Fam	gcagctga	cataggtagaat...405...	ggtaaatgatgccaaagttt	GTTTcTGTGgTGT	tgcaaatgttctatgta	taattgac
F. Cat	gcagctga	cacaggcagaat...402...	ggtaaatgatgccaaagttt	GTTTcTGTGgTGT	tgcaaatgttctatgta	taattgac
B. Tau	gcagctga	cacaacagaat...399...	ggtaaatgatgccaaagttt	GTTTcTGTGgTGT	tgcaaatgttctatgta	taattgac
E. Cab	gcagctga	cacaggcagaat...410...	ggtaaatgatgccaaagttt	GTTTcTGTGgTGT	tgcaaatgttctatgta	taattgac
S. Sus	gcagctga	cataggcagaac...405...	ggtaaatgatgccaaagttt	GTTTcTGTGgTGT	tgcaaatgttctatgta	taattgac
L. Afr	acagctga	cactggcagggc...388...	ggtaaatgataccaaagttt	GTTTcTGTGgTGT	tgcaaatgttctatgta	taattaac
	*****	* **	** * * *	*****	*****	**** **

id=820717 gene=ENSG00000107758 name=PPP3CB segment=chr10.75203895.75204357_-1 type=AN

H. Sap	ttaatgc	aaaggaaat...364...	tcgagtattttataaacagt	AGCACACAatAAAT	tccatgcatgggccgctgctcct	atcctctgt
R. Mac	ttaatgc	aaaggaaat...364...	tcgagtattttataaacagt	AGCACACAatAAAT	tccatgcatgggccgctgctcct	atcctctgt
P. Tro	ttaatgc	aaaggaaat...364...	tcgagtattttataaacagt	AGCACACAatAAAT	tccatgcatgggccgctgctcct	atcctctgt
P. Abe	ttaatgc	aaaggaaat...364...	tcgagtattttataaacagt	AGCACACAatAAAT	tccatgcatgggccgctgctcct	atcctctgt
C. Jac	ttaatgc	aaaggaaat...365...	tcgagtattttataaacagt	AGCACACAatAAAT	tccatgcatgggccgctgctcct	atcctctgt
C. Por	ttaatgc	aaaggaaat...361...	tcgagtattttataaacagt	AGCACACAatAAAT	tccatgcatgggccgctgctcct	atcctctgt
O. Cun	ttaatgc	aaaggaaat...364...	ttgaatattttataaacagt	AGCACACAatAAAT	tccatgcatgggccgctgctcct	atcctctgt
C. Fam	ttgatgc	aaaggaaat...364...	tcgagtattttataaacagt	AGCACACAatAAAT	tccatgcatgggccgctgctcct	atcctctgt
F. Cat	ttgatgc	aaaggaaat...365...	tcgagtattttataaacagt	AGCACACAatAAAT	tccatgcatgggccgctgctcct	atcctctgt
B. Tau	ttgatgc	aaaggaaat...362...	tcgagtattttataaacagt	AGCACACAatAAAT	tccatgcatgggccgctgctcct	atcctctgt
E. Cab	ttgatgc	aaaggaaat...364...	tcaaatattttataaacagt	AGCACACAatAAAT	tccatgcatgggccgctgctcct	atcctctgt
S. Sus	ttgatgc	aaaggaaat...363...	tcgagtattttataaacagt	AGCACACAatAAAT	tccatgcatgggccgctgctcct	atcctctgt
L. Afr	ttaatgc	aaaggaaat...364...	acgagtattttataaacagt	AGCACACAatAAAT	tccatgcatgggccgctgctcct	atcctctgt
	*** **	*****	* *****	*****	*****	*****

id=820724 gene=ENSG00000107758 name=PPP3CB segment=chr10.75196564.75196996_-1 type=E3 VIEW

Figure 167: CS=3.9



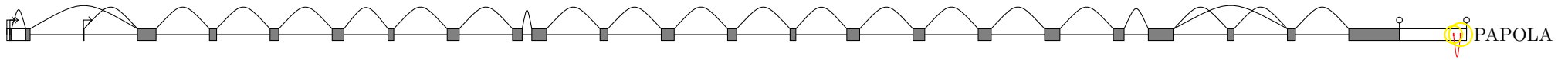
H. Sap	ttttcag	atacagaaaatgtg	TGAAATGCTCA	aaGTTTCa	AAATAcAG	GT	-----acctat
R. Mac	ttttcag	atacagaaaatgtg	TGAAATGCTCA	aaGTTTCa	AAATAcAG	GT	-----acctat
P. Tro	ttttcag	atacagaaaatgtg	TGAAATGCTCA	aaGTTTCa	AAATAcAG	GT	-----acctat
P. Abe	ttttcag	atacagaaaatgtg	TGAAATGCTCA	aaGTTTCa	AAATAcAG	GT	-----acctat
C. Jac	ttttcag	atacagaaaatgtg	TGAAATGCTCA	aaGTTTCa	AAATAcAG	GT	-----acatat
M. Mus	ttttcag	a-----	-----	TACAGAAAAA	GTGTG	aaatgctcaaagtttcaaatacaggtacatat	
R. Nor	ttttcag	a-----	-----	TACAGAAAAA	GTGTG	aaatgctcaaagtttcaaatacaggtacctat	
C. Por	ttttcag	atacagaaaatgtg	TGAAATGCTCA	aaGTTTCa	AAATAcAG	GT	-----acatat
O. Cun	ttttcag	atacagaaaatgtg	TGAAATGCTCA	aaGTTTCa	AAATAcAG	GT	-----acatat
C. Fam	ttttcag	atacagaaaatgtg	TGAAATGCTCA	aaGTTTCa	AAATAcAG	GT	-----acatat
B. Tau	ttttcag	atacagaaaatgtg	TGAAATGCTCA	aaGTTTCa	AAATAcAG	GT	-----acatat
E. Cab	ttttcag	atacagaaaatgtg	TGAAATGCTCA	aaGTTTCa	AAATAcAG	GT	-----acatat
O. Avi	ttttcag	atacagaaaatgtg	TGAAATGCTCA	aaGTTTCa	AAATAcAG	GT	-----acatat
L. Afr	ttttcag	atacagaaaatgtg	TGAAATGCTCA	aaGTTTCa	AAATA	-----caggtacatat	
*****	*			* * * *			** **

id=795793 gene=ENSG00000101746 name=NOL4 segment=chr18_31708813_31708853_-1 type=AN

H. Sap	ttttcata	ggtcctaaaaga...995...-tggtgaatataatgtgaaa-----	ATCTTATTGAAATa	TGAGTATTTTG	gaaatacatagctgcacaaa...99...gatttctgtgtt	aaaagaat-	
R. Mac	ttttcata	ggtcctaaaaga...1004...ttggtgaatataatgtgaaa-----	ATCTTATTGAAATa	TGAGTATTTTG	gaaatacatagctgcacaaa...99...gatttctgtgtt	aaaacaat-	
P. Tro	ttttcata	ggtcctaaaaga...993...ttggtgaatataatgtgaaa-----	ATCTTATTGAAATa	TGAGTATTTTG	gaaatacatagctgcacaaa...99...gatttctgtgtt	aaaacaat-	
P. Abe	ttttcata	ggtcctaaaaga...992...ttggtgaatataatgtgaaa-----	ATCTTATTGAAATa	TGAGTATTTTG	gaaatacatagctgcacaaa...99...gatttctgtgtt	aaaacaat-	
C. Jac	ttttcata	ggtcctaaaaga...1007...ttggtgaatataatgtgaaa-----	ATCTTATTGAAATc	TGAGTATTTTG	gaaatacatagatgcataaa...97...gatttctgtgtt	aaaacaat-	
M. Mus	ttttcata	ggtcctaaaaga...855...-gtgattgtgaccaggtaatg	TGCAC	TTTTCTGTGA	-----actgtggacattgctatgct--...273...gatttctgtgtt	aaagaaat-	
R. Nor	ttttcata	ggttctaaaag...886...-gtgattgtgaccaggtaatg	TGCAC	TTTTCTGTGA	-----actgtggacattgctatgct--...252...gatttctgtgtt	aaagaaat-	
C. Por	ttttcata	ggtcctaaaaga...1012...ttggtgaatataatgtgaaa-----	ATCTTATTGAAATa	TGAGTATTTTG	gaaatacatagatgcacaaa...98...gatttctgtgtt	-aaacaatg	
O. Cun	ttttcata	ggtcctaaaaga...1006...ttggtgaatataatgtgaaa-----	ATCTTATTGAAATa	TGAGTATTTTG	gaaatacatagatgcacaaa...99...gatttctgtgtt	aaaacaat-	
C. Fam	ttttcata	ggtcctaaaaga...985...ttggtgaatataatgtgaaa-----	ATCTTATTGAAATa	TGAGTATTTTG	gaaatacatagatgcacaaa...103...gatttctgtgtt	aaaacaat-	
B. Tau	ttttcata	ggtcctaaaaga...995...ttggtgaatataatgtgaaa-----	ATCTTATTGAAATa	TGAGTATTTTG	gaaatacatagatgcacaaa...96...gatttctgtgtt	aaaact-	
E. Cab	ttttcata	ggtcctaaagaga...1002...ttggtgaatataatgtgaaa-----	ATCTTATTGAAATa	TGAGTATTTTG	gaaatacatagatgcacaaa...99...gatttctgtgtt	aaaacagt-	
O. Avi	ttttcata	ggtcctaaaaga...991...ttggtgaatataatgtgaaa-----	ATCTTATTGAAATa	TGAGTATTTTG	gaaatacatagatgcacaaa...98...gatttctgtgtt	aaaacaat-	
L. Afr	ttttcata	ggtcctaaaaga...988...-gtgaaatataatgtgaaaatt-----	TATTGAAATa	TGAGTATTTTG	gaaatacatagatgcacaaa...100...gatttctgtgtt	aaaacagt-	
*****	*** **	*** * * * *		* * * *	*** * *	*****	** *

id=795818 gene=ENSG00000101746 name=NOL4 segment=chr18_31431071_31432253_-1 type=E3 VIEW

Figure 168:



H. Sap	tttatgta--	tttttcattaga...1492...aattatagttttcataacctGGAGatCAGACTGTTGcttttcgcatgatgatgtag...88...tccattgaaaac	acaataaa
R. Mac	tttatgta--	tttttcattaga...1487...aattatagttttcataacctGGAGatCAGACTGTTGcttttcgcatgatgatgtag...88...tccattgaaaac	acaataaa
P. Tro	tttatgta--	tttttcattaga...1490...aattatagttttcataacctGGAGatCAGACTGTTGcttttcgcatgatgatgtag...88...tccattgaaaac	acaataaa
P. Abe	tttatgta--	tttttcattaga...1490...aattatagttttcataacctGGAGatCAGACTGTTGcttttcgcatgatgatgtag...89...tccattgaaaac	acaataaa
C. Jac	tttatgta--	ttttttattaga...1493...aattatagttttcataacctGGAGatCAGACTGTTGcttttcgcatgatgatgtag...88...tccattgaaaac	acaataaa
M. Mus	tttatgta--	ttttttttaat...1478...acttctagtttcataacctGGAGatCAGACTGTTGcttttcgcatgatgtag...88...tccattgaaaac	acaataaa
R. Nor	tttatgtatt	ttttttatta--...1231...nnnnnnnnnnnnnnnnnnntGGAGatCAGACTGTTGcttttcgcatgatgtag...88...tccattgaaaac	acaataaa
O. Cun	-ttatgta-t	ttttttattagg...1441...aattctagttttcataacctGGAGatCAGACTGTTGcttttcgcatgatgatgtag...88...tccattgaaaac	acaataaa
C. Fam	tttatgta-t	ttttttattagg...1484...aattctagttttcataacctGGAGatCAGACTGTTGcttttcgcatgatgatgtag...88...tccattgaaaac	acaataaa
F. Cat	--tatgtaat	ttttttattaga...1508...aattctagttttcataacctGGAGatCAGACTGTTGcttttcgcatgatgatgtag...88...tccattgaaaac	acaataaa
B. Tau	tttatgta--	ttttttattatt...1473...aattctagttttcataacctGGAGatCAGACTGTTGcttttcgcatgatgtag...88...tccattgaaaac	acaataaa
E. Cab	--tatgtatt	ttttttattaga...1487...aattctagttttcataacctGGAGatCAGACTGTTGcttttcgcatgatgatgtag...88...tccattgaaaac	acaataaa
S. Sus	tttatgta-t	ttttttattagg...1490...aattctagttttcataacctGGAGatCAGACTGTTGcttttcgcatgatgtag...88...tccattgaaaac	acaataaa
L. Afr	tttatgta--	ttttttattaga...1449...aattctcgttttcacgacctGGAGatCAGACTGTTGcttccgcatgactggagtt...69...tccattgaaaac	acaataaa
	*****	***** **	***** **

id=445609 gene=ENSG0000090060 name=PAPOLA segment=chr14_97031766_97033425.1 type=E3

H. Sap	tttatgta--	tttttcattaga...1557...actggagttt-gctttgttttATAGTATCTGtaCTCCttgtatttttcaagagctattttgtaaacagatgatgatttctccattgaaaac	acaataaa
R. Mac	tttatgta--	tttttcattaga...1552...actggagttt-gctttgttttATAGTATCTGtaCTCCttgtatttttcaagagctattttgtaaacagatgatgatttctccattgaaaac	acaataaa
P. Tro	tttatgta--	tttttcattaga...1555...actggagttt-gctttgttttATAGTATCTGtaCTCCttgtatttttcaagagctattttgtaaacagatgatgatttctccattgaaaac	acaataaa
P. Abe	tttatgta--	tttttcattaga...1556...-ctggagttttgctttgttttATAGTATCTGtaCTCCttgtatttttcaagagctattttgtaaacagatgatgatttctccattgaaaac	acaataaa
C. Jac	tttatgta--	ttttttattaga...1558...actggagttt-gctttgttttATAGTATCTGtaCTCCttgtatttttcaagagctattttgtaaacagatgatgatttctccattgaaaac	acaataaa
M. Mus	tttatgta--	ttttttttaat...1543...actggagttt-gctttgttttATAGTATCTGtaCTCCttgtatttttcaagagctattttgtaaacagatgatgatttctccattgaaaac	acaataaa
R. Nor	tttatgtatt	ttttttatta--...1296...actggagttt-gctttgttttATAGTATCTGtaCTCCttgtatttttcaagagctattttgtaaacagatgatgatttctccattgaaaac	acaataaa
O. Cun	-ttatgta-t	ttttttattagg...1506...actggagttt-gctttgttttATAGTATCTGtaCTCCttgtatttttcaagagctattttgtaaacagatgatgatttctccattgaaaac	acaataaa
C. Fam	tttatgta-t	ttttttattagg...1549...actggagttt-gctttgttttATAGTATCTGtaCTCCttgtatttttcaagagctattttgtaaacagatgatgatttctccattgaaaac	acaataaa
F. Cat	--tatgtaat	ttttttattaga...1573...actggagttt-gctttgttttATAGTATCTGtaCTCCttgtatttttcaagagctatttcgtaaacagatgatgatttctccattgaaaac	acaataaa
B. Tau	tttatgta--	ttttttattatt...1538...actggagttt-gctttgttttATAGTATCTGtaCTCCttgtatttttcaagagctattttgtaaacagatgatgatttctccattgaaaac	acaataaa
E. Cab	--tatgtatt	ttttttattaga...1552...actggagttt-gctttgttttATAGTATCTGtaCTCCttgtatttttcaagagctattttgtaaacagatgatgatttctccattgaaaac	acaataaa
S. Sus	tttatgta-t	ttttttattagg...1555...actggagttt-gctttgttttATAGTATCTGtaCTCCttgtatttttcaagagctattttgtaaacagatgatgatttctccattgaaaac	acaataaa
L. Afr	tttatgta--	ttttttattaga...1495...actggagttt-gctttgttttATAGTATCTGtaCTCCtcgtatttttcaagagctattttgtaaacagatgatgatttctccattgaaaac	acaataaa
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id=445609 gene=ENSG0000090060 name=PAPOLA segment=chr14_97031766_97033425.1 type=E3 VIEW

Figure 169:



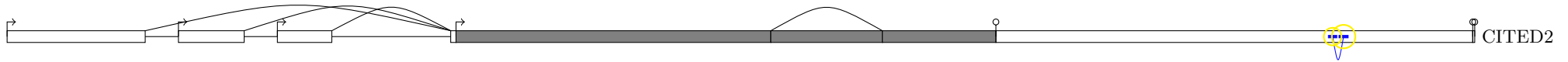
H.Sap	gaagttgg	gtgagatggcag...109...----	gagggtttggag-gccttggag	GGTAGc	TGGCAACAGct	GGGT	gctggtt-gtgtgtccaatttg...51...ctgctttatcag	actacgcg
R.Mac	gaagttgg	gtgaggtggcag...109...----	gagggtttggag-gccttggag	GGTAGc	TGGCAACAGct	GGGT	gctggtt-gtgtgtccaatttg...51...ctgctttatcag	actacgcg
P.Tro	gaagttgg	gtgaggtggcag...109...----	gagggtttggag-gccttggag	GGTAGc	TGGCAACAGct	GGGT	gctggtt-gtgtgtccaatttg...51...ctgctttatcag	actacgcg
P.Abe	gaagttgg	gtgaggtggcag...106...----	gagggtttggag-gccttggag	GGTAGc	TGGCAACAGct	GGGT	gctggtt-gtgtgtccaatttg...51...ctgctttatcag	actacgcg
C.Jac	gaagttgg	gtgaggtgacag...109...----	gagggtttggag-gccttggag	GGTAGc	TGGCAACAGct	GGGT	gctggtt-gtgtgtccaatttg...51...ctgctttatcag	actacgcg
M.Mus	ttagttgg	ttgaggtggcag...94...-----	ggccttagagagacctggat	GTAGc	TGGCAACAGct	GGGT	gctggtt-gtgtgtccaatttg...51...ctgctttatcag	actacgcg
C.Por	ggagttga	gagaagtggcag...105...----	ggagggtttggag-gcc-tggag	GGTAGc	TGGCAACAGct	GGGT	gctggtt-gtgtgtccaatttg...51...ctgctttatcag	actacgcg
O.Cun	ggagttgg	gtgaggtggcag...101...----	gtagggtttggag-gcc-tggag	GGTAGc	TGGCAACAGct	GGGT	gctggtt-gtgtgtccaatttg...51...ctgctttatcag	actacgcg
C.Fam	aaagttga	gtgaggttagcag...103...----	ggagggtttggag-gcc-tggag	GGTAGc	TGGCAACAGct	GGGT	gctggtt-gtgtgtccaatttg...51...ctgctttatcag	actacgcg
F.Cat	agagttga	gttgagtgatgt...104...----	ggagggtttggag-gcc-tggag	GGTAGc	TGGCAACAGct	GGGT	gctggtt-gtgtgtccaatttg...51...ctgctttatcag	actacgcg
B.Tau	gcaattgg	gtgaggtggcag...101...----	ggagggtttggag-gcc-tggag	GGTAGc	TGGCAACAGct	GGGT	gctggtt-gtgtgtccaatttg...52...ctgctttatcag	actacgcg
O.Avi	gcagttgg	gtgaggtggcag...110...-----	gtttggag-gcc-tggaggtac	TGGCAACAGct	GGGT	gctggtt-gtgtgtccaatttg...52...ctgctttatcag	actacgcg	
L.Afr	gaagttgg	gtgaggtggcag...100...aagagaagg	gtttggag-gcc-TGGTGATAGc	TGGCAACAGct	GGGT	gctggtt-gtgtgtccaatttg...51...ctgctttatcag	actacgcg	
	* **	*	* ** * * * * * * * *	**	*****	*****	*****	*****

id=16576 gene=ENSG00000239306 name=RBM14 segment=chr11.66391440.66391684.1 type=IN

H.Sap	gaagttgg	gtgagatggcag...189...cctgccccctaattgcta	ACCCt	CTGTc	TGCTGct	TTATCag	actacgcg
R.Mac	gaagttgg	gtgaggtggcag...189...cctgccccctaattgcta	ACCCt	CTGTc	TGCTGct	TTATCag	actacgcg
P.Tro	gaagttgg	gtgaggtggcag...189...cctgccccctaattgcta	ACCCt	CTGTc	TGCTGct	TTATCag	actacgcg
P.Abe	gaagttgg	gtgaggtggcag...186...cctgccccctaattgcta	ACCCt	CTGTc	TGCTGct	TTATCag	actacgcg
C.Jac	gaagttgg	gtgaggtgacag...189...cctgccccctaattgcta	ACCCt	CTGTc	TGCTGct	TTATCag	actacgcg
M.Mus	ttagttgg	ttgaggtggcag...173...cctgccccctaattgcta	ACCCt	CTGTc	TGCTGct	TTATCag	actacgcg
C.Por	ggagttga	gagaagtggcag...185...cctgccccctaattgcta	ACCCt	CTGTc	TGCTGct	TTATCag	actacgcg
O.Cun	ggagttgg	gtgaggtggcag...181...cctgccccctaattgcta	ACCCt	CTGTc	TGCTGct	TTATCag	actacgcg
C.Fam	aaagttga	gtgaggttagcag...183...cctgccccctaattgcta	ACCCt	CTGTc	TGCTGct	TTATCag	actacgcg
F.Cat	agagttga	gttgagtgatgt...184...cctgccccctaattgcta	ACCCt	CTGTc	TGCTGct	TTATCag	actacgcg
B.Tau	gcaattgg	gtgaggtggcag...182...cctgccccctaattgcta	ACCCt	CTGTc	TGCTGct	TTATCag	actacgcg
O.Avi	gcagttgg	gtgaggtggcag...185...cctgccccctaattgcta	ACCCt	CTGTc	TGCTGct	tttatcag	actacgcg
L.Afr	gaagttgg	gtgaggtggcag...184...cctgccccctaattgcta	ACCCt	CTGTc	TGCTGct	TTATCag	ACTA
	* **	*	*****	*****	*****	*****	*****

id=16576 gene=ENSG00000239306 name=RBM14 segment=chr11.66391440.66391684.1 type=IN VIEW

Figure 170:



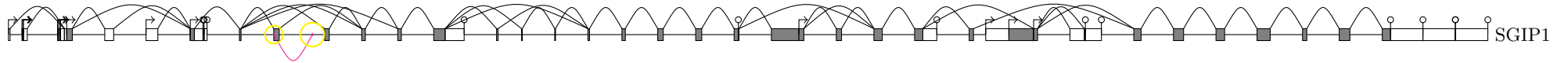
H.Sap	gctgttga	ctcgatcgaaac...599...ccccccaccatgatgtACAGATGA	t-AATAGGGTGTGGAATGTcGTCA	TGGCaaACATTTCACagATTTTATTTTGTttCTGT	cttcaacatthttgacactg-...142...aaagtaagaaa	t-aacttgt-
R.Mac	gctgttga	ctcgatcgaaac...597...caccaccaccatgatgtACAGATGA	t-AATAGGGTGTGGAATGTcGTCA	TGGCaaACATTTCACagATTTTATTTTGTttCTGT	cttcaaca-ttttgacactg...141...aaagtaagaaa	t-aacttgt-
P.Tro	gctgttga	ctcgatcgaaac...599...ccccccaccatgatgtACAGAGAT	t-AATAGGGTGTGGAATGTcGTCA	TGGCaaACATTTCACagATTTTATTtGTTTCTGT	cttcaacatthttgacactg-...142...aaagtaagaaa	t-aacttgt-
P.Abe	gctgttga	ctcgatcgaaac...598...gccccccaccatgatgtACAGATGA	t-AATAGGGTGTGGAATGTcGTCA	TGGCaaACATTTCACagATTTTATTTTGTttCTGT	cttcaacatthttgacactg-...142...aaagtaagaaa	t-aacttgt-
M.Mus	gctgttga	ctcggtaaac...623...gtctccccccatgatgtACAGACAA	t-AATAGGGTGTGGAATGTcGTCA	TGGCaaACATTTCACagATTTTATTTTGTttCTGT	cttcaacatthttgacactg-...142...aaagtaagaaa	taaactgt--
R.Nor	gctgttga	ctcggtaaac...647...tctccccccatgatgtACAGACAATAA	t-AATAGGGTGTGGAATGTcGTCA	TGGCaaACATTTCACagATTTTATTtTGTTTCTGT	cttcaacatthttgacactg-...142...aaagtaagaaa	t-aacttgt-
C.Por	gctgttga	ctcgatccaac...603...tgtccccccatgatgtACAGAc---	t-AATAGGGTGTGGAATGTcGTCA	TGGCaaACATTTCACagATTTTATTTTGTttctgt	cttcaacatthttgacactg-...148...aaagtaagaaa	t-atttgtt
O.Cun	gctgttga	ctcgagcgggag...672...gtccccctccccctgatgtACAGAAAT	t-AATAGGGTGTGGAATGTcGTCA	TGGCaaACATTTCACagATTTTATTTTGTttctgt	cttcaacatthttgacactg-...142...aaagtaagaaa	t-aacttgtt
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id=285308 gene=ENSG0000164442 name=CITED2 segment=chr6_139693396_139694268_-1 type=E3

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R.Mac	gctgttga	ctcgatcgaaac...597...caccaccaccatgatgtACAGATGA	t-AATAGGGTGTGGAATGTcGTCA	TGGCaaACATTTCACagATTTTATTTTGTttCTGT	cttcaaca-ttttgacactg...141...aaagtaagaaa	t-aacttgt-
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P.Abe	gctgttga	ctcgatcgaaac...598...gccccccaccatgatgtACAGATGA	t-AATAGGGTGTGGAATGTcGTCA	TGGCaaACATTTCACagATTTTATTTTGTttCTGT	cttcaacatthttgacactg-...142...aaagtaagaaa	t-aacttgt-
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*****	* *	** *** *****	*****	*****	*****	* * **

id=285308 gene=ENSG0000164442 name=CITED2 segment=chr6_139693396_139694268_-1 type=E3 VIEW

Figure 171:



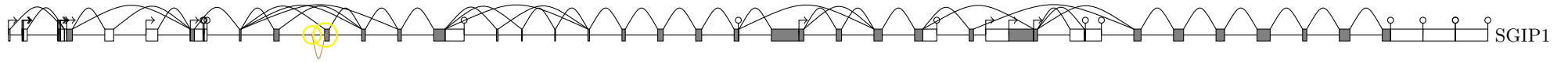
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R. Mac	atggaatt	gtaagtatttaa...934...-tgatcagacattgggtaaca	CTATAATca	AGGCTCTATTCAG	CAGGggaa
P. Tro	atggaatt	gtaagtatttaa...932...-tgatcagacattgggtaaca	CTATAATca	AGGCTCTATTCAG	CAGGggaa
P. Abe	atggaatt	gtaagtatttaa...935...-tgatcagacattgggtaaca	CTATAATca	AGGCTCTATTCAG	CAGGggaa
C. Jac	atggaatt	gtaagtatttaa...947...-tgatcagacattgggtaaca	CTATAATca	AGGCTCTATTCAG	CAGGggaa
R. Nor	atggaatt	gtaagtatttaa...973...-ttgatcagactttgggtacc	CTATAATca	AGGCTCTATTCAG	CAGGggaa
C. Por	acggcact	gtaagtatttaa...892...-tgaccggccttgggtacc	CTATAATca	AGGCTCTATTCAG	CAGGggaa
O. Cun	atggaatt	gtaagtatttaa...968...-tt-atcagactttgggtaaca	CTATAATca	AGGCTCTATTCAG	CAGGggaa
C. Fam	atggaatt	gtaagtatttaa...946...-tgatcagacattgggtaacg	CTATAATca	AGGCTCTATTCAG	CAGGggaa
F. Cat	atggaatt	gtaagtatttaa...950...-tgaccagacattgggtaaca	CTATAATca	AGGCTCTATTCAG	CAGGggaa
B. Tau	atggaatt	gtaagtatttaa...954...-ttatcagacattgggtaaca	CTATAATca	AGGCTCTATTCAG	CAGGggaa
E. Cab	atggaatt	gtaagtatttaa...948...-tgatcagacattgggtaaca	CTATAATca	AGGCTCTATTCAG	CAGGggaa
S. Sus	atggaatt	gtaagtatttaa...954...-ttatcagacattgggtaaca	CTATAATca	AGGCTCTATTCAG	CAGGggaa
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	***	*****	*	*****	*****

id=728395 gene=ENSG00000118473 name=SGIP1 segment=chr1.67098778.67099762.1 type=IN

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R. Mac	tgtctcag	gtactctctgct...1541...tcttggcctaaccaagctgg	CCTGCTGAATAGAGCCTc	ATTATGG	gccccaaagtccactgcttg-	...147...aatcaattccag	cagcccag
P. Tro	tgtctcag	gtactctctgct...1544...tcttggcctaaccaagctgg	CCTGCTGAATAGAGCCTc	ATTATGG	gccccaaagtccactccttg-	...147...aatcaattccag	cagcccag
P. Abe	tgtctcag	gtactctctgct...1537...tcttggcctaaccaagctgg	CCTGCTGAATAGAGCCTc	ATTATGG	gccccaaagtccactccttg-	...147...aatcaattccag	caaccag
C. Jac	tgtctcag	gtactctctgct...1566...tcgtggcctaaccaagctgg	CCTGCTGAATAGAGCCTc	ATTATGG	gccccaaagtccactccttg-	...148...aatcaattccag	cagcccag
R. Nor	tgtctcag	gtactctctgct...1461...tcttggccttagccagactgg	CCTGCTGAATAGAGCCTc	ATTATGGG	gccccaaagtccactccttg-	...148...aatcaattccag	cagcccag
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C. Fam	tgtctcag	gtactctctgct...1668...tcctggcctagccaaactgg	CCTGCTGAATAGAGCCTc	ATTATGG	gccccaaagtccactccttg-	...146...aatcaattccag	cagcccag
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B. Tau	tgtctcag	gtactctgcttc...1911...tcctggcctagccacactgg	CCTGCTGAATAGAGCCTc	ATTATGG	gccccaaagtccactccttg-	...147...aatcaattccag	cagcccag
E. Cab	tgtttcag	gtactctctgct...1601...tcctggcctagccatgctgg	CCTGCTGAATAGAGCCTc	ATTATGG	gccccaaagtccactccttg-	...147...aatcaattccag	cagcccag
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id=728397 gene=ENSG00000118473 name=SGIP1 segment=chr1.67099847.67101626.1 type=IN VIEW

Figure 172: CS=10.92



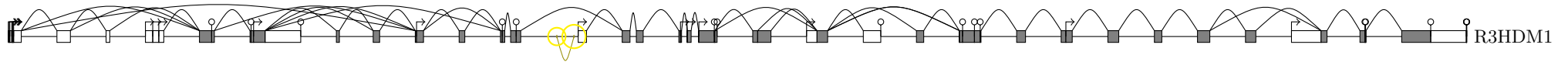
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C.Por	tgtctcag	gtacactctgcc...1406...tcctcctccacctgctcc-	CTGGc	CTGCTGAAT	agagcctcgttatgggcccc...162...aatcaattccag	cagcccag
O.Cun	tgtctcag	gtactctctgct...1578...ctactcct-aacctaacaaa	CTGGc	CTGCTGAAT	agagcctcattatgggcccc...158...aatcaattccag	cagcccag
C.Fam	tgtctcag	gtactctctgct...1664...cttctcct-ggcctagccaaa	CTGGc	CTGCTGAAT	agagcctcattatgggcccc...161...aatcaattccag	cagcccag
F.Cat	tgtctcag	gtactctctgct...1590...cttctcct-ggcctagctaca	CTGGc	CTGCTGAAT	agagcctcattatgggcccc...162...aatcaattccag	cagcccag
B.Tau	tgtctcag	gtactctgcttc...1907...cttctcct-ggcctagccaca	CTGGc	CTGCTGAAT	agagcctcattatgggcccc...162...aatcaattccag	cagcccag
E.Cab	tgtttcag	gtactctctgct...1597...cttctcct-ggcctagccatg	CTGGc	CTGCTGAAT	agagcctcattatgggcccc...162...aatcaattccag	cagcccag
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id=728397 gene=ENSG00000118473 name=SGIP1 segment=chr1.67099847.67101626.1 type=IN

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P.Tro	tgtctcag	gtactctctgct...1741...tttctacatgaaaacaatca	ATTc	CAg	CAGc	CCA	g
P.Abe	tgtctcag	gtactctctgct...1734...tttctacatgaaaataatca	ATTc	CAg	CAc	CCA	g
C.Jac	tgtctcag	gtactctctgct...1764...tttctacatgaaaacaatca	ATTc	CAg	CAGc	CCA	g
R.Nor	tgtctcag	gtactctctgct...1660...tttctacatgaaaacaatca	ATTc	CAg	CAGc	CCA	g
C.Por	tgtctcag	gtacactctgcc...1607...tttctacatgaaaacaatca	ATTc	CAg	CAGc	CCA	g
O.Cun	tgtctcag	gtactctctgct...1775...tttctacatgaaaacaatca	ATTc	CAg	CAGc	CCA	g
C.Fam	tgtctcag	gtactctctgct...1864...tttctacatgaaaacaatca	ATTc	CAg	CAGc	CCA	g
F.Cat	tgtctcag	gtactctctgct...1791...tttctacatgaaaacaatca	ATTc	CAg	CAGc	CCA	g
B.Tau	tgtctcag	gtactctgcttc...2108...tttctacatgaaaacaatca	ATTc	CAg	CAGc	CCA	g
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id=728397 gene=ENSG00000118473 name=SGIP1 segment=chr1.67099847.67101626.1 type=IN VIEW

Figure 173: CS=12.48



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P. Tro  acaagaat gtaagtgtcaag...1378...--tgactct--ctaagggttttcaATACAGTGTAACTCAGTtATTGAAttatgaatgatgtcaaaaag-----...235...attaccgctcc agccttga
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C. Fam  acaagaat gtaagtatcatt...1423...gatgactct--ctaagggttttcGATACAGTGTAACTCAGTtATTGAACTgtgtgattgatcagaaag-----...225...attaccgctcc agccttga
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E. Cab  acaagaat gtaagtatacag...1769...ggtgactct--ctaagggttttcAATACAGTGTAACTCAGTtATTGAACTgtgcaaatgatccagggtt...223...attaccgctcc agccttga
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O. Avi  nnnnaaat gtaagtatcaag...1336...----ttttgactaacatthttgact--GGTGacTCTCTAAGGTTTC--aatgcatgtaacctcagtt-----...259...attaccgctcc agccttga
L. Afr  acaagaat gtaagtgtcaag...1306...ggggactct--ctaagggttttcAATACAGTGTAACTCAGTtATTGAACTctatgaatgatgtcagaagg-----...233...attaccgctcc agccttga
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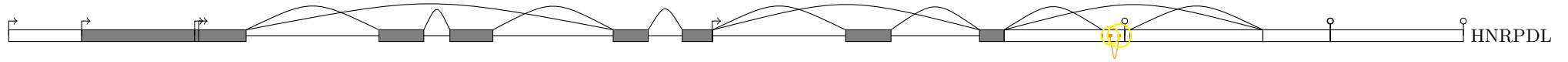
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P. Abe  acaagaat gtaagtgtcaag...1563...-----ggtcaataata--taatcagacAGTTCAGATcATTGAAGTTACACTGTATT-ttttttttaataatcttctgggatatgaagaaggtt:::accttttcctcataggagatta-ccgctcc agccttga
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E. Cab  acaagaat gtaagtatacag...1907...atcaatagcataatta--taacTAGTcATTTCGGATcATTGAAGTTACACTGTATTctt-----atttatcttctgggaaatgaagaagatt:::acgttttcctcataggcagatta-ccgctcc agccttga
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O. Avi  nnnnaaat gtaagtatcaag...1573...--atgaagaaggatg--taaatca----GAAAACCTTAGAGAcTGCT-----:gccttttcctcataggcagatta-ccgctcc agccttga
L. Afr  acaagaat gtaagtgtcaag...1454...--cataacataatta--taactga-CATTTCGGATcATTGAAGTTACACTGTATTctt-----atttatcttctgggataaagaaggtt:::gccttttcctcataggcagatta-ccgctcc agccttga
*** ***** * * ** * ** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

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Figure 174: CS=9



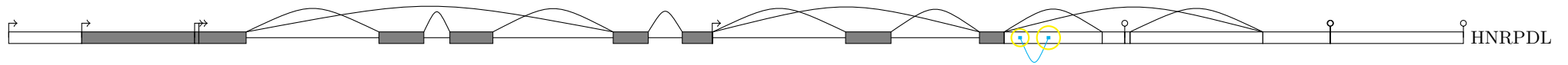
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R.Mac	cccgccag	cgggaacttca	TTGCAGgc	CGTGTGtc	ACCCTg	accacgtctatctctctgggggtcg	cacggttcg	gggcagagcg	caaggcataca	ccagaaaa
P.Tro	cccgccag	cgggaacttca	TTGCAGgc	CGTGTGtc	ACCCTg	accacgtctatctctctgggggtcg	cacggttcg	gggcagagcg	caaggcataca	ccagaaaa
P.Abe	cccgccag	cgggaacttca	TTGCAGgc	CGTGTGtc	ACCCTg	accacgtctatctctctgggggtcg	cacggttcg	gggcagagcg	caaggcataca	ccagaaaa
C.Jac	cccgccag	cgggaacttca	TTGCAGgc	CGTGTGtc	ACCCTg	accacgtctatctctctgggggtcg	cacggttcg	gggcagagcg	caaggcataca	ccagaaaa
M.Mus	cccgccag	cgggaacttca	TTGCAGgc	CGTGTGtc	ACCCTg	accacgtctatctctctgggggtcg	cacggttcg	gggcagagcg	caaggcataca	ccagaaaa
R.Nor	cccgccag	cgggaacttca	TTGCAGgc	CGTGTGtc	ACCCTg	accacgtctatctctctgggggtcg	cacggttcg	gggcagagcg	caaggcataca	ccagaaaa
C.Por	cccgccag	cgggaacttca	TTGCAGgc	CGTGTGtc	ACCCTg	accacgtctatctctctgggggtcg	cacggttcg	gggcagagcg	caaggcataca	ccagaaaa
O.Cun	cccgccag	cgggaacttca	TTGCAGgc	CGTGTGtc	ACCCTg	accacgtctatctctctgggggtcg	cacggttcg	gggcagagcg	caaggcataca	ccagaaaa
C.Fam	cccgccag	cgggaacttca	TTGCAGgc	CGTGTGtc	ACCCTg	accacgtctatctctctgggggtcg	cacggttcg	gggcagagcg	caaggcataca	ccagaaaa
F.Cat	cccgccag	cgggaacttca	TTGCAGgc	CGTGTGtc	ACCCTg	accacgtctatctctctgggggtcg	cacggttcg	gggcagagcg	caaggcataca	ccagaaaa
B.Tau	cccgccag	cgggaacttca	TTGCAGgc	CGTGTGtc	ACCCTg	accacgtctatctctctgggggtcg	cacggttcg	gggcagagcg	caaggcataca	ccagaaaa
E.Cab	cccgccag	cgggaacttca	TTGCAGgc	CGTGTGtc	ACCCTg	accacgtctatctctctgggggtcg	cacggttcg	gggcagagcg	caaggcataca	ccagaaaa
S.Sus	cccgccag	cgggaacttca	TTGCAGgc	CGTGTGtc	ACCCTg	accacgtctatctctctgggggtcg	cacggttcg	gggcagagcg	caaggcataca	ccagaaaa
O.Avi	cccgccag	cgggaacttca	TTGCAGgc	CGTGTGtc	ACCCTg	accacgtctatctctctgggggtcg	cacggttcg	gggcagagcg	caaggcataca	ccagaaaa
L.Afr	cccgccag	cgggaacttca	TTGCAGgc	CGTGTGtc	ACCCTg	accacgtctatctctctgggggtcg	cacggttcg	gggcagagcg	caaggcataca	ccagaaaa
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id=338259 gene=ENSG00000152795 name=HNRPDL segment=chr4.83346736.83346820.-1 type=AN

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R.Mac	cccgccag	cgggaacttcattgcaggccgtgtgtcaccctgaccacgtctatctctg	GGGGTCGCACGTTGCGG	gcagagcgcaaggcataca	ccagaaaa
P.Tro	cccgccag	cgggaacttcattgcaggccgtgtgtcaccctgaccacgtctatctctg	GGGGTCGCACGTTGCGG	gcagagcgcaaggcataca	ccagaaaa
P.Abe	cccgccag	cgggaacttcattgcaggccgtgtgtcaccctgaccacgtctatctctg	GGGGTCGCACGTTGCGG	gcagagcgcaaggcataca	ccagaaaa
C.Jac	cccgccag	cgggaacttcattgcaggccgtgtgtcaccctgaccacgtctatctctg	GGGGTCGCACGTTGCGG	gcagagcgcaaggcataca	ccagaaaa
M.Mus	cccgccag	cgggaacttcattgcaggccgtgtgtcaccctgaccacgtctatctctg	GGGGTCGCACGTTGCGG	gcagagcgcaaggcataca	ccagaaaa
R.Nor	cccgccag	cgggaacttcattgcaggccgtgtgtcaccctgaccacgtctatctctg	GGGGTCGCACGTTGCGG	gcagagcgcaaggcataca	ccagaaaa
C.Por	cccgccag	cgggaacttcattgcaggccgtgtgtcaccctgaccacgtctatctctg	GGGGTCGCACGTTGCGG	gcagagcgcaaggcataca	ccagaaaa
O.Cun	cccgccag	cgggaacttcattgcaggccgtgtgtcaccctgaccacgtctatctctg	GGGGTCGCACGTTGCGG	gcagagcgcaaggcataca	ccagaaaa
C.Fam	cccgccag	cgggaacttcattgcaggccgtgtgtcaccctgaccacgtctatctctg	GGGGTCGCACGTTGCGG	gcagagcgcaaggcataca	ccagaaaa
F.Cat	cccgccag	cgggaacttcattgcaggccgtgtgtcaccctgaccacgtctatctctg	GGGGTCGCACGTTGCGG	gcagagcgcaaggcataca	ccagaaaa
B.Tau	cccgccag	cgggaacttcattgcaggccgtgtgtcaccctgaccacgtctatctctg	GGGGTCGCACGTTGCGG	gcagagcgcaaggcataca	ccagaaaa
E.Cab	cccgccag	cgggaacttcattgcaggccgtgtgtcaccctgaccacgtctatctctg	GGGGTCGCACGTTGCGG	gcagagcgcaaggcataca	ccagaaaa
S.Sus	cccgccag	cgggaacttcattgcaggccgtgtgtcaccctgaccacgtctatctctg	GGGGTCGCACGTTGCGG	gcagagcgcaaggcataca	ccagaaaa
O.Avi	cccgccag	cgggaacttcattgcaggccgtgtgtcaccctgaccacgtctatctctg	GGGGTCGCACGTTGCGG	gcagagcgcaaggcataca	ccagaaaa
L.Afr	cccgccag	cgggaacttcattgcaggccgtgtgtcaccctgaccacgtctatctctg	GGGGTCGCACGTTGCGG	gcagagcgcaaggcataca	ccagaaaa
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id=338259 gene=ENSG00000152795 name=HNRPDL segment=chr4.83346736.83346820.-1 type=AN VIEW

Figure 175:



H. Sap	gaaaacag	gtgtgtataagagtacaggaaaacagta-gaa:::-----	TTTAAtTTAA
R. Mac	gaaaacag	gtgtgtataagagtacaggaaaacagta-gaa:::-----	TTTAAtTTAA
P. Tro	gaaaacag	gtgtgtataaaagtacaggaaaacagta-gaa:::-----	TTTAAtTTAA
P. Abe	gaaaacag	gtgtgtataagagtacaggaaaacagta-gaa:::-----	TTTAAtTTAA
C. Jac	aaaaacag	gtgtgtataagagtacaggaaaacagta-gaa:::-----	TTTAAtTTAA
M. Mus	gagagcag	gtgtgtgaga--tgcaggaaagcatt--gca:::-----	TTTAAcTTAA
R. Nor	gagagcag	gtgtgtg--aggctacaggaaaacattg-gca::: :ttaacttttttagaactattaacaggtaaagtactgaaa	TGGGTACAAcT TAA
C. Por	gaaaacag	gtgtgtataa--gtgcaaaaaccagt-gaa:::-----	TTTAAtTTAA
O. Cun	gaaaacag	gtgtgtataagagt-gcaagaaccagtgaaaa:::-----	TTTAAtTTAA
C. Fam	gaaaacag	gtgtgtgtaagagtacaagaaccagtg-gaa:::-----	TTTAAtTTAA
F. Cat	gaaaacag	gtgtgtataagagtacaagaaccagtg-gaa:::-----	TTTAAtTTAA
B. Tau	gaaaacag	gtgtgtatcagagttcaagaaccagta-gaa:::-----	TTAA
E. Cab	gaaaacag	gtgtgtataagagtacgagaaccagtg-gaa:::-----	TTTAAtTTAA
S. Sus	gaaaacag	gtgtgtataagcgttcgagaaccagtg-gaa:::-----	TTAA
O. Avi	gaaaacag	gtgtgtatcagagttcaagaaccagtg-gaa:::-----	TTTAAtTTAA
L. Afr	gaaaacag	gtgtgtataagagtacaagaaccagtg-gaa:::-----	TTTAAtTTAA

H. Sap	AGATCaATAGACA	aatgaa---acgtaaaaaaaaatactatgtagcctg-t::: :ctctgacattataccttgttgtaccgccag	cgggaact
R. Mac	AGATCaATAGACA	----a---acgtaaaaaaaaatactatgtagcctg-t::: :ctctgacattataccttgttgtaccgccag	cgggaact
P. Tro	AGATCaATAGACA	aatgaa---acgtaaaaaaaaatactatgtagcctg-t::: :ctctgacattataccttgttgtaccgccag	cgggaact
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M. Mus	AGATCaATAGACA	aatgaaaaaacagagtaaatgatgtgtgtag----t::: :ctctgacattataccttgttgtaccgccag	cgggaact
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C. Fam	AGATCaATAGACA	aatgaaaaataagtaaaaacaaatattacgtagctg-t::: :ctctgacattataccttgttgtaccgccag	cgggaact
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L. Afr	gaaaacag	gtgtgtataaga..124..-gagcctgt---tttgccctaaag---	TGTCTATaGATCTTTAAcTTAAA	---gtctgatctcacttttttagtatt-acag::: :ctctgacattataccttgttgtaccgccag	cgggaact

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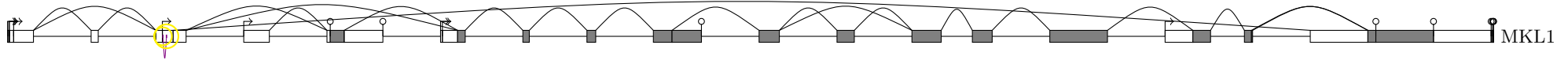
H. Sap	gaaaacag	gtgtgtataaga...323...aactctgacattataccttg	TTTGtaCCCGcCAG	CGggaact
R. Mac	gaaaacag	gtgtgtataaga...320...aactctgacattataccttg	TTTGtaCCCGcCAG	CGggaact
P. Tro	gaaaacag	gtgtgtataaaa...323...aactctgacattataccttg	TTTGtaCCCGcCAG	CGggaact
P. Abe	gaaaacag	gtgtgtataaga...324...aactctgacattataccttg	TTTGtaCCCGcCAG	CGggaact
C. Jac	aaaaacag	gtgtgtataaga...325...aactctgacattataccttg	TTTGtaCCCGcCAG	CGggaact
M. Mus	gagagcag	gtgtgtgagatg...318...aactctgacattataccttg	TTTGtaCCCGcCAG	CGggaact
R. Nor	gagagcag	gtgtgtgaggct...318...aactctgacattataccttg	TTTGtaCCCGcCAG	CGggaact
C. Por	gaaaacag	gtgtgtataagt...322...aactctgacattataccttg	TTTGtaCCCGcCAG	CGggaact
O. Cun	gaaaacag	gtgtgtataaga...324...aactctgacattataccttg	TTTGtaCCCGcCAG	CGggaact
C. Fam	gaaaacag	gtgtgtgtaaga...330...aactctgacattataccttg	TTTGtaCCCGcCAG	CGggaact
F. Cat	gaaaacag	gtgtgtataaga...327...aactctgacattataccttg	TTTGtaCCCGcCAG	CGggaact
B. Tau	gaaaacag	gtgtgtatcaga...325...aactctgacattataccttg	TTTGtaCCCGcCAG	CGggaact
E. Cab	gaaaacag	gtgtgtataaga...327...aactctgacattataccttg	TTTGtaCCCGcCAG	CGggaact
S. Sus	gaaaacag	gtgtgtataagc...331...aactctgacattataccttg	TTTGtaCCCGcCAG	CGggaact
O. Avi	gaaaacag	gtgtgtatcaga...326...aactctgacattataccttg	TTTGtaCCCGcCAG	CGggaact
L. Afr	gaaaacag	gtgtgtataaga...329...aactctgacattataccttg	TTTGtaCCCGcCAG	CGggaact
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id=338258 gene=ENSG00000152795 name=HNRPDL segment=chr4.83346821.83347189-1 type=AN

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R. Mac	cccgccag	cgggaacttcat...26...gtctatctctgggggtcgca	CGTTGCGGGCAGA	gcgcaaggcataca	ccagaaaa
P. Tro	cccgccag	cgggaacttcat...26...gtctatctctgggggtcgca	CGTTGCGGGCAGA	gcgcaaggcataca	ccagaaaa
P. Abe	cccgccag	cgggaacttcat...26...gtctatctctgggggtcgca	CGTTGCGGGCAGA	gcgcaaggcataca	ccagaaaa
C. Jac	cccgccag	cgggaacttcat...26...gtctatctctgggggtcgca	CGTTGCGGGCAGA	gcgcaaggcataca	ccagaaaa
M. Mus	cccgccag	cgggaacttcat...26...gtctatctctgggggtcgca	CGTTGCGGGCAGA	gcgcaaggcataca	ccagaaaa
R. Nor	cccgccag	cgggaacttcat...26...gtctatctctgggggtcgca	CGTTGCGGGCAGA	gcgcaaggcataca	ccagaaaa
C. Por	cccgccag	cgggaacttcat...26...gtctatctctgggggtcgca	CGTTGCGGGCAGA	gcgcaaggcataca	ccagaaaa
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C. Fam	cccgccag	cgggaacttcat...26...gtctatctctgggggtcgca	CGTTGCGGGCAGA	gcgcaaggcataca	ccagaaaa
F. Cat	cccgccag	cgggaacttcat...26...gtctatctctgggggtcgca	CGTTGCGGGCAGA	gcgcaaggcataca	ccagaaaa
B. Tau	cccgccag	cgggaacttcat...26...gtctatctctgggggtcgca	CGTTGCGGGCAGA	gcgcaaggcataca	ccagaaaa
E. Cab	cccgccag	cgggaacttcat...26...gtctatctctgggggtcgca	CGTTGCGGGCAGA	gcgcaaggcataca	ccagaaaa
S. Sus	cccgccag	cgggaacttcat...26...gtctatctctgggggtcgca	CGTTGCGGGCAGA	gcgcaaggcataca	ccagaaaa
O. Avi	cccgccag	cgggaacttcat...26...gtctatctctgggggtcgca	CGTTGCGGGCAGA	gcgcaaggcataca	ccagaaaa
L. Afr	cccgccag	cgggaacttcat...26...gtctatctctgggggtcgca	CGTTGCGGGCAGA	gcgcaaggcataca	ccagaaaa
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id=338259 gene=ENSG00000152795 name=HNRPDL segment=chr4.83346736.83346820-1 type=AN VIEW

Figure 177:



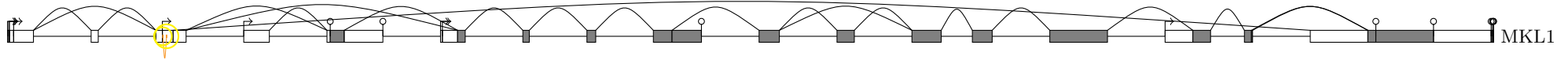
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R. Mac	cCCCCTTC	CGTC	attgctgtgaatgggctgga...57...accagtc	ccccca	gagcgaag
P. Tro	cCCCCTTC	CGTC	attgctgtgaatgggctgga...57...accagtc	ccccca	gagtgaag
P. Abe	cCCCCTTC	CGTC	attgctgtgaatgggctgga...57...accagtc	ccccca	gagcgaag
C. Jac	cCCCCTTC	CGTC	attgctgtgaatgggctgga...57...accagtc	ccccca	gagtgaag
M. Mus	cCCCCTTC	CGTC	attgctgtgaatgggctgga...57...cccagc	ccccca	gagcgaag
R. Nor	cCCCCTTC	CGTC	attgctgtgaatgggctgga...57...cccagc	ccccca	gagcgaag
C. Por	cCCCCTTC	CGTC	attgctgtgaatgggctgga...57...accagc	ccctca	gagtgaag
O. Cun	cCCCCTTC	CGTC	attgctgcgaatgggctgga...57...cccagc	ccccca	gagcgaag
C. Fam	cCCCCTTC	CGTC	attgctgtgaatgggctgga...57...cccagc	ccctca	gagcgaag
B. Tau	cCCCCTTC	CGTC	attgctgtgaatgggctgga...57...tccagc	ccccca	gagcgaag
E. Cab	cCCCCTTC	CGTC	attgctgtgaatgggctgga...57...acctag	ccccca	gagtgaag
L. Afr	cCCCCTTC	CGTC	attgctgtgaatgggctgga...57...accagc	ccctca	gagcgaag
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R. Mac	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGG	ctggcgaaaatgatgatgaa...26...accagtc	ccccca	gagcgaag
P. Tro	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGG	ccggcgaaaatgatgatgaa...26...accagtc	ccccca	gagtgaag
P. Abe	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGG	ccggcgaaaatgatgatgaa...26...accagtc	ccccca	gagcgaag
C. Jac	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGG	ccggcgaaaatgatgatgaa...26...accagtc	ccccca	gagtgaag
M. Mus	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGG	ctggcgaaaatgacgacgag...26...cccagc	ccccca	gagcgaag
R. Nor	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGG	ctggcgaaaatgatgaggaa...26...cccagc	ccccca	gagcgaag
C. Por	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGG	ctggcgaaaatgatgaagaa...26...accagc	ccctca	gagtgaag
O. Cun	cccccttc	cgtcattgctgcgaatgggctg	GACGGAGG	AGGGG	ctggcgaaaatgacgacgaa...26...cccagc	ccccca	gagcgaag
C. Fam	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGG	ctggcgaaaatgatgatgaa...26...cccagc	ccctca	gagcgaag
B. Tau	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGG	ccggcgagaatgacgatgaa...26...tccagc	ccccca	gagcgaag
E. Cab	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGG	ctggcgaaaatgaggatgaa...26...acctag	ccccca	gagtgaag
L. Afr	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGG	ctggcgaaaatgatgatgag...26...accagc	ccctca	gagcgaag
	*****	*****	*****	*****	*****	*****	*****

id=224806 gene=ENSG00000196588 name=MKL1 segment=chr22_40948223_40948315_-1 type=EN VIEW

Figure 178: CS=7.8



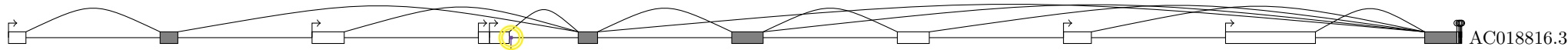
H.Sap	atttccag	attgccatcacgaaagccaagtggatttctccagtgtggtg	TGCCtGCCCCCTTC	CGTCattg
R.Mac	atttccag	attgccatcacgaaagccaagtggatttctccagtgtggtg	TGCCtGCCCCCTTC	CGTCattg
P.Tro	atttccag	attgccatcacgaaagccaagtggatttctccagtgtggtg	TGCCtGCCCCCTTC	CGTCattg
P.Abe	atttccag	attgccatcacgaaagccaagtggatttctccagtgtggtg	TGCCtGCCCCCTTC	CGTCattg
C.Jac	atttccag	gtagccatcacgaaagccaagtggatttctccagtgtggtg	TGCCtGCCCCCTTC	CGTCattg
M.Mus	atttctag	gttaccatcacgaaagccaagtggatttctccagtgtggtg	TGCCtGCCCCCTTC	CGTCattg
R.Nor	atttctag	gttaccatcacgaaagccaagtggatttctccagtgtggtg	TGCCtGCCCCCTTC	CGTCattg
C.Por	atttccaa	gctgccatcacaaaagtcaaagtggatttctccagtgtggtg	TGCTtGCCCCCTTC	CGTCattg
O.Cun	acttttag	gttgtcatcacgaaagccaagtggatttctccagtgtggtg	TGCCtGCCCCCTTC	CGTCattg
C.Fam	atttccag	gttgccatcacgaaagccaagtggatttctccagtgtggtg	TGCCtGCCCCCTTC	CGTCattg
B.Tau	gtttccag	gttgccatcacgaaagccaagtggatttctccagtgtggtg	TGCCtGCCCCCTTC	CGTCattg
E.Cab	atttccag	gttgccatcacgaaagccaagtggatttctccagtgtggtg	TGCCtGCCCCCTTC	CGTCattg
L.Afr	atttccag	gttgccatcacgaaagccaagtggatttctccagtgtggtg	TGCCtGCCCCCTTC	CGTCattg
	** *	***** **	*****	*****

id=224805 gene=ENSG00000196588 name=MKL1 segment=chr22_40948316_40948371_-1 type=EN

H.Sap	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGGC	GGCG	aaaatgatgatgaaccagtgctcgtgtccttatctcgggcacccagtc	ccccca	gagtgaag
R.Mac	cccccttc	cgtcattgctgtgaatgggactg	GACGGAGG	AGGGGC	GGCG	aaaatgatgatgaaccagtgctcgtgtccttatctcgggcacccagtc	ccccca	gagcgaag
P.Tro	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGGC	GGCG	aaaatgatgatgaaccagtgctcgtgtccttatctcgggcacccagtc	ccccca	gagtgaag
P.Abe	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGGC	GGCG	aaaatgatgatgaaccagtgctcgtgtccttatctcgggcacccagtc	ccccca	gagcgaag
C.Jac	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGGC	GGCG	aaaatgatgatgaaccagtgctcgtgtccttatctcgggcacccagtc	ccccca	gagtgaag
M.Mus	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGGC	GGCG	aaaatgacgacgagccagtgtcctgtctctgtctcgggccccagccccca	ccccca	gagcgaag
R.Nor	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGGC	GGCG	aaaatgatgaggaaccggtgctcctgtctctgtctcgggccccagccccca	ccccca	gagcgaag
C.Por	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGGC	GGCG	aaaatgatgaagaaccggtgctcacgtccctgtctgtcaccagccctca	ccccca	gagtgaag
O.Cun	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGGC	GGCG	acaatgacgacgaaccagtgtcgtgtcctgtccgggccccagccccca	ccccca	gagcgaag
C.Fam	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGGC	GGCG	aaaatgatgatgaaccagtgttggtgtccctgtctcgggccccagccctca	ccccca	gagcgaag
B.Tau	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGGC	GGCG	agaatgacgatgaaccggttctgggtcctgtcggcgtcccagccccca	ccccca	gagcgaag
E.Cab	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGGC	GGCG	aaaatgaggatgaaccagtgtgggtcctgtctcgggcacccagccccca	ccccca	gagtgaag
L.Afr	cccccttc	cgtcattgctgtgaatgggctg	GACGGAGG	AGGGGC	GGCG	aaaatgatgatgagccagtactgggtcctgtcagggcaccagccctca	ccccca	gagcgaag
	*****	*****	*****	*****	*****	*****	*****	*****

id=224806 gene=ENSG00000196588 name=MKL1 segment=chr22_40948223_40948315_-1 type=EN VIEW

Figure 179: CS=3.9



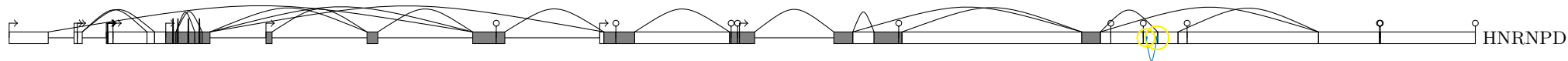
H. Sap	ctcggagc	agacaaactaac...27...cacaagtgctaaggttctgg	TTAGttCTTTTCTAG	gtAAAGtt
R. Mac	ctcagagc	agacaaactaac...27...cacaagtgctaaggttctgg	TTAGttCTTTTCTAG	gtAAAGtt
P. Tro	ctcggagc	agacaaactaac...27...cacaagtgctaaggttctgg	TTAGttCTTTTCTAG	gtAAAGtt
P. Abe	ctcggagc	agacaaactaac...27...cacaagtgctaaggttctgg	TTAGttCTTTTCTAG	gtAAAGtt
C. Jac	ctcagagc	agacaagctaac...27...cacaagtgctaaggttctgg	TTAGctCTTTTCTAG	gtAAAGtt
R. Nor	gtcagagc	acagagactaac...27...cacaagtgctaaggttctgg	TTAGttCTTTTCTAG	gtAAAGtt
C. Por	cctgtgtc	agacacactaac...27...cgcaagctctagggttctgc	TTAGttCTTTTCTAG	gtAAAGtt
O. Cun	accgccgc	tgacactgaagt...26...-----tgctgaggttctgg	tgagctCTTTTCTAG	gtAAAGtt
C. Fam	gtcagagc	agacaaactgac...27...cacaagtgctaaggttctgg	TTAGttCTTTTCTAG	gtAAAGtt
B. Tau	gtcagagc	agacaaaccgac...27...cacaagtgctaaggttctgg	TTAGttCTTTTCTAG	gtAAAGtt
E. Cab	gtcagagc	acacaaactgac...27...cacaagtgctaaggttctgg	TTAGttCTTTTCTAG	gtAAAGtt
S. Sus	gtcacagc	agacaaactgac...27...cacaagctctagggttctgg	TTAGttCTTTTCTAG	gtAAAGtt
O. Avi	gtcagagc	agacaaaccgac...27...cacaagtgctaaggttctgg	TTAGttCTTTTCTAG	gtAAAGtt
L. Afr	gccgccgc	acacaaactgac...27...cacaagtgctaaggttctgg	TTAGttCTTTTCTAG	gtAAAGtt
	*	* *	** ***** * ** *****	*****

id=461104 gene=ENSG00000235978 name=AC018816.3 segment=chr3.4872960_4873033_-1 type=AN

H. Sap	tTTTCTAG	GtAAAGTTGG	aaaagtccctgcaaggcaa...215...ttttcttcccag	gttcaaaa
R. Mac	tTTTCTAG	GtAAAGTTGG	aaaagtccctgcaaggcaa...240...ttttcttcccag	gttcaaaa
P. Tro	tTTTCTAG	GtAAAGTTGG	aaaagtccctgcaaggcaa...208...ttttcttcccag	gttcaaaa
P. Abe	tTTTCTAG	GtAAAGTTGG	aaaagtccctgcaaggcaa...228...ttttcttcccag	gttcaaaa
C. Jac	tTTTCTAG	GtAAAGTTGG	aaaagtccctgcaaggcaa...255...tttacttcccag	gttcaaaa
R. Nor	tTTTCTAG	GtAAAGTTGG	aaaagtccctgcaaggcaa...236...ttctcttcccag	gttcaact
C. Por	tTTTCTAG	GtAAAGTTGG	aaaagtccctgcaaggcaa...219...ttttcttcccag	attcaact
O. Cun	tTTTCTAG	GtAAAGTTGG	aaaagtccctgcaaggcaa...143...tcccttctcctag	gttccact
C. Fam	tTTTCTAG	GtAAAGTTGG	aaaagtccctgcaaggcaa...198...tcttcttcccag	gttcaact
B. Tau	tTTTCTAG	GtAAAGTTGG	aaaagtccctgcaaggcaa...225...ccctcttcccag	gttcaact
E. Cab	tTTTCTAG	GtAAAGTTGG	aaaagtccctgcaaggcaa...191...cttctctcccag	gttcaact
S. Sus	tTTTCTAG	GtAAAGTTGG	aaaagtccctgcaaggcaa...213...tctccttcccag	gttcaact
O. Avi	tTTTCTAG	GtAAAGTTGG	aaaagtccctgcaaggcaa...222...ccctcttcccag	gttcaact
L. Afr	tTTTCTAG	GtAAAGTTGG	aaaagtccctgcaaggcaa...180...tcccttcccag	gtttaact
	*****	*****	* *	*** ** **

id=461105 gene=ENSG00000235978 name=AC018816.3 segment=chr3.4872703_4872959_-1 type=IN VIEW

Figure 180: CS=4.2



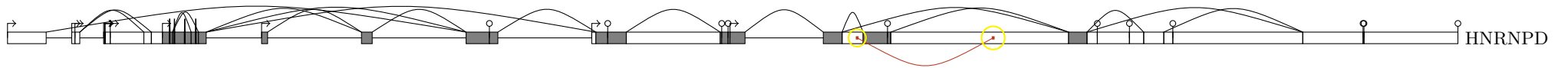
H. Sap	cTGCTaaT	GGGTACAAATTAAGG	aattgcagcaaaaaagtatt...29...tgtaccgccag	cggggaact
R. Mac	cTGCTaaT	GGGTACAAATTAAGG	aattgcagcaaaaaagtatt...29...tgtaccgccag	cggggaact
P. Tro	cTGCTaaT	GGGTACAAATTAAGG	aattgcagcaaaaaagtatt...29...tgtaccgccag	cggggaact
P. Abe	cTGCTaaT	GGGTACAAATTAAGG	aattgcagcaaaaaagtatt...29...tgtaccgccag	cggggaact
C. Jac	cTGCTaaT	GGGTACAAATTAAGG	aattgcagcaaaaaagtatt...29...tgtaccgccag	cggggaact
M. Mus	cTGCTaaT	GGGTACAAATTAAGG	aattgcagcaaaaaagaata...31...tgtaccgccag	cggggaact
R. Nor	cTGCTaaT	GGGTACAAATTAAGG	aattgcagcaaaaaaaat...32...tgtaccgccag	cggggaact
C. Por	cTGCTaaT	GGGTACAAATTAAGG	aattacagcaaaaaagtatt...29...tgtaccgccag	cggggagct
O. Cun	cTGCTaaT	GGGTACAAATTAAGG	aattgcagcaaaaaagtatt...29...tgtaccgccag	cggggaact
C. Fam	cTGCTaaT	GGGTACAAATTAAGG	aattgcagcaaaaaatatt...29...tgtaccgccag	cggggaact
B. Tau	cTGCTaaT	GGGTACAAATTAAGG	aattgcagcaaaaaactatt...29...tgtaccgccag	cggggaact
E. Cab	cTGCTaaT	GGGTACAAATTAAGG	aattgcagcaaaaaagtatt...29...tgtaccgccag	cggggaact
S. Sus	cTGCTaaT	GGGTACAAATTAAGG	aattgcagcaaaaaagtatt...29...tgtaccgccag	cggggaact
O. Avi	cTGCTaaT	GGGTACAAATTAAGG	aattgcagcaaaaannnt...29...tgtaccgccag	cggggaact
L. Afr	cTGCTaaT	GGGTACAAATTAAGG	aattgcagcaaaaaagtatt...29...tgtaccgccag	cggggaact
	*****	*****	*****	*****

id=208078 gene=ENSG00000138668 name=HNRNPD segment=chr4.83276155.83276230_-1 type=AN

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R. Mac	ctgcta	aatgggtacaaatta...25...ctactaactctgacattata	CCTTGTTTGTACCGccAG	CGGgaact
P. Tro	ctgcta	aatgggtacaaatta...25...ctactaactctgacattata	CCTTGTTTGTACCGccAG	CGGgaact
P. Abe	ctgcta	aatgggtacaaatta...25...ctactaactctgacattata	CCTTGTTTGTACCGccAG	CGGgaact
C. Jac	ctgcta	aatgggtacaaatta...25...ctactaactctgacattata	CCTTGTTTGTACCGccAG	CGGgaact
M. Mus	ctgcta	aatgggtacaaatta...27...ctactaactctgacattata	CCTTGTTTGTACCGccAG	CGGgaact
R. Nor	ctgcta	aatgggtacaaatta...28...ctactaactctgacattata	CCTTGTTTGTACCGccAG	CGGgaact
C. Por	ctgcta	aatgggtacaaatta...25...ctactaactctgacattata	CCTTGTTTGTACCGccAG	CGGgagct
O. Cun	ctgcta	aatgggtacaaatta...25...ctactaactctgacattata	CCTTGTTTGTACCGccAG	CGGgaact
C. Fam	ctgcta	aatgggtacaaatta...25...ctactaactctgacattata	CCTTGTTTGTACCGccAG	CGGgaact
B. Tau	ctgcta	aatgggtacaaatta...25...ctactaactctgacattata	CCTTGTTTGTACCGccAG	CGGgaact
E. Cab	ctgcta	aatgggtacaaatta...25...ctactaactctgacattata	CCTTGTTTGTACCGccAG	CGGgaact
S. Sus	ctgcta	aatgggtacaaatta...25...ctactaactctgacattata	CCTTGTTTGTACCGccAG	CGGgaact
O. Avi	ctgcta	aatgggtacaaatta...25...cttctaactctgacattata	CCTTGTTTGTACCGccAG	CGGgaact
L. Afr	ctgcta	aatgggtacaaatta...25...ctactaactctgacattata	CCTTGTTTGTACCGccAG	CGGgaact
	*****	*****	*****	*****

id=208078 gene=ENSG00000138668 name=HNRNPD segment=chr4.83276155.83276230_-1 type=AN VIEW

Figure 181:



H. Sap	agggtggtg	gtaagctagagc...33...-----ttaattatcctgaagtaaag-----	ATCTTTGCTGATCTTCT	gactttagtgaacctattaatgtgctgcag	gccccagt
R. Mac	agggtggtg	gtaagctagagc...33...-----ttaattatcctgaagtaaag-----	ATCTTTGCTGATCTTCT	gactttagtgaacctattaatgtgctgcag	gccccagt
P. Tro	agggtggtg	gtaagctagagc...33...-----ttaattatcctgaagtaaag-----	ATCTTTGCTGATCTTCT	gactttagtgaacctattaatgtgctgcag	gccccagt
P. Abe	agggtggtg	gtaagctagagc...33...-----ttaattatcctgaagtaaag-----	ATCTTTGCTGATCTTCT	gactttagtgaacctattaatgtgctgcag	gccccagt
C. Jac	agggtggtg	gtaagctagagc...33...-----ttaattatcctgaagtaaag-----	ATCTTTGCTGATCTTCT	gactttagtgaacctattaatgtgctgcag	gccccagt
M. Mus	agggtggag	gtaagctgtaac...41...-----gaagtaaagatctttgctga-----	TCTGACTTTAGTgAACCTATTAaTGTGctGCAGGCC	-----ccagt	
R. Nor	aggcggtg	gtaagctataac...41...-----gaagtaaagatctttgctga-----	TCTGACTTTAGTgAACCTATTAaTGTGctGCAGGCC	-----ccagt	
C. Por	agggtggtg	gtaagctatagc...33...-----ttaattatcctgaagtaaag-----	ATCTTTGCTGATCTTCT	gactttagtgaacctattaatgtgctgcag	gccccagt
O. Cun	agggtggtg	gtaagctaaacc...28...-----ttaattatcctgaagtaaag-----	ATCTTTGCTGATCTTCT	gactttagtgaacctattaatgtgctgcag	gccccagt
C. Fam	agggtggtg	gtaagctagagc...34...-----ttaattatcctgaagtaaag-----	ATCTTTGCTGATCTTCT	gactttagtgaacctattaatgtgctgcag	gccccagt
B. Tau	agggtggtg	gtaagcttagc...34...-----ttaattatcctgaagtaaag-----	ATCTTTGCTGATCTTCT	gactttagtgaacctattaatgtgctgcag	gccccagt
E. Cab	agggtggtg	gtaagcgagagc...33...-----ttaattatcctgaagtaaag-----	ATCTTTGCTGATCTTCT	gactttagtgaacctattaatgtgctgcag	gccccagt
S. Sus	agggtggtg	gtaagctcgagc...34...-----ttaattatcctgaagtaaag-----	ATCTTTGCTGATCTTCT	gactttagtgaacctattaatgtgctgcag	gccccagt
O. Avi	agggtggtg	gtaagcnnagc...34...-----ttaattatcctgaagtaaag-----	ATCTTTGCTGATCTTCT	gactttagtgaacctattaatgtgctgcag	gccccagt
L. Afr	agggtggtg	gtaagctagagc...28...gctttttaattatcctgaagTAAAGATCTTTGCTGATCTTCTGACTTTAGTgaACCTATTAaTGTGctGCAGGCC		-----ccagt	*****
	*** ** *	***** * *	*****	**** * * * * * * * * * * * *	*****

id=208071 gene=ENSG00000138668 name=HNRNPD segment=chr4.83277837.83277948_-1 type=AN

H. Sap	ttatagca	gtaagtactata...685...-----ataggttaattaaagtcaga-----	AGAAGGTCAGCAAAGAT	-----ggattgggtgagat-tggggc-----	...369...gttttattttag	accagcag
R. Mac	ttatagca	gtaagtactata...686...-----ataggttaattaaagtcaga-----	AGAAGGTCAGCAAAGAT	-----ggattgggtgagat-tggggc-----	...369...gttttattttag	accagcag
P. Tro	ttatagca	gtaagtactata...683...-----ataggttaattaaagtcaga-----	AGAAGGTCAGCAAAGAT	-----ggattgggtgagat-tggggc-----	...369...gttttattttag	accagcag
P. Abe	ttatagca	gtaagtactata...683...-----ataggttaattaaagtcaga-----	AGAAGGTCAGCAAAGAT	-----ggattgggtgagat-tggggc-----	...370...gttttattttag	accagcag
C. Jac	ttatagca	gtaagtactata...673...-----attggttaattaaagtcaga-----	AGAAGGTCAGCAAAGAT	-----ggattgggtgaaat-tgtggc-----	...363...gttttattttag	accagcag
M. Mus	ttatagca	gtaagtactata...656...gtccttttcttaggtgactaGGCCTGCtGCACAaT-----	AATAGGTTaACTAAAGTCAGA	agaaggtcagcaaagatgta-----	...362...aaattattttag	atcagcag
R. Nor	ctatagca	gtaagtactata...619...gttcttttcttaggtgactaGGCCTGCtGCACAaT-----	AATAGGTTaACTAAAGTCAGA	aggaggtcagcaaagatgta-----	...372...aaattattttag	atcagcag
C. Por	ttatagca	gtaagtactata...670...-----acaggttaactaaagtcaga-----	AGAAGGTCAGCAAAGAT	-----gaagcgggtgagat-gggggc-----	...338...tttctattttag	accagcag
O. Cun	ttatagca	gtaagtactata...714...-----acaggttaactaaagtcaga-----	AGAAGGTCAGCAAAGAT	-----ggattgggtgagac-tggagc-----	...316...attttttaag	accagcag
C. Fam	ttatagca	gtaagtactata...672...-----ataggctaactaaagtcaga-----	AGAAGGTCAGCAAAGAT	-----ggattgggtgagat-tggagc-----	...336...ttttattttag	accagcag
B. Tau	ttatagca	gtaagtactata...677...-----ataggctaactaaagtcaga-----	AGAAGGTCAGCAAAGAT	-----ggctgggtgagct-tggagc-----	...342...ttttacttttag	accagcag
E. Cab	ttatagca	gtaagtactata...683...-----ataggctaactaaatcaga-----	AGAAGGTCAGCAAAGAT	-----ggattgggtgagat-tggagc-----	...352...ttttattttag	accagcag
S. Sus	ttatagca	gtaagtactata...646...-----ataggctaactaaagtcaga-----	AGAAGGTCAGCAAAGAT	-----ggattgggtgagat-tggcct-----	...388...ttttattttag	accagcag
O. Avi	ttatagca	gtaagtaacnnn...686...-----ataggcaactaaagtcaga-----	AGAAGGTCAGCAAAGAT	-----ggctgggtgagat-tggagc-----	...343...ttttacttttag	accagcag
L. Afr	ttatagca	gtaagtactata...632...agtcttttcttaggtgactaGGCCTGCtGCACAaTAATAGGTaaACTAAAGTCtGAAGGTCAGCAAAGATggTTTG-----		-----ggtgagatctggggccttt...360...ttttattttag		accagcag
	*****	*****	*****	**** * * * * *	* *	* * * * *

id=208074 gene=ENSG00000138668 name=HNRNPD segment=chr4.83276555.83277689_-1 type=AN VIEW

Figure 182: CS=7.2



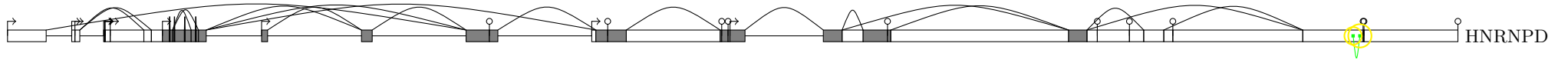
H.Sap	aggtggtg	gtaagctagagc...53...--atctttgctgatcttctgac	TTTAGTGAACCTATTA	atgtgctgcag	gccccagt
R.Mac	aggtggtg	gtaagctagagc...53...--atctttgctgatcttctgac	TTTAGTGAACCTATTA	atgtgctgcag	gccccagt
P.Tro	aggtggtg	gtaagctagagc...53...--atctttgctgatcttctgac	TTTAGTGAACCTATTA	atgtgctgcag	gccccagt
P.Abe	aggtggtg	gtaagctagagc...53...--atctttgctgatcttctgac	TTTAGTGAACCTATTA	atgtgctgcag	gccccagt
C.Jac	aggtggtg	gtaagctagagc...53...--atctttgctgatcttctgac	TTTAGTGAACCTATTA	atgtgctgcag	gccccagt
M.Mus	aggtggag	gtaagctgtaac...47...aagatctttgctga--tctgac	TTTAGTGAACCTATTA	atgtgctgcag	gccccagt
R.Nor	aggcgggtg	gtaagctataac...47...aagatctttgctga--tctgac	TTTAGTGAACCTATTA	atgtgctgcag	gccccagt
C.Por	aggtggtg	gtaagctatagc...53...--atctttgctgatcttctgac	TTTAGTGAACCTATTA	atgtgctgcag	gccccagt
O.Cun	aggtggtg	gtaagctaaacc...48...--atctttgctgatcttctgac	TTTAGTGAACCTATTA	atgtgctgcag	gccccagt
C.Fam	aggtggtg	gtaagctagagc...54...--atctttgctgatcttctgac	TTTAGTGAACCTATTA	atgtgctgcag	gccccagt
E.Cab	aggtggtg	gtaagcgagagc...53...--atctttgctgatcttctgac	TTTAGTGAACCTATTA	atgtgctgcag	gccccagt
S.Sus	aggtggtg	gtaagctagagc...54...--atctttgctgatcttctgac	TTTAGTGAACCTATTA	atgtgctgcag	gccccagt
L.Afr	aggtggtg	gtaagctagagc...53...--atctttgctgatcttctgac	TTTAGTGAACCTATT	aatgtgctgcag	gccccagt
	*** ** *	***** * *	*****	*****	*****

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id=208082 gene=ENSG00000138668 name=HNRNPD segment=chr4.83274987.83275307.-1 type=EN VIEW

Figure 183:



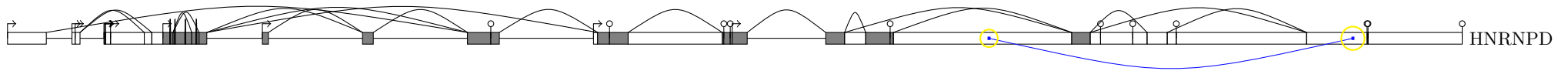
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C. Fam	gtctccag	gtggtgaagcag...218..gtattgtagagcaagtcttg	TGTT	---AAAAAGCCAGTGT	GACAGtgtcatgatgtagtagt	gtcttactggTTTTTAATAaatccttttgat	aaaaatgt
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M. Mus	gtctccag	gtggtgaagcag...261...acagtgtcatgatgtagtag	TGTC	TACTGGT	TTTTTAATA	Aaatccttttgat	aaaaatgt
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C. Fam	gtctccag	gtggtgaagcag...256...acagtgtcatgatgtagtag	TGTC	TACTGGT	TTTTTAATA	Aaatccttttgat	aaaaatgt
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** *****	**** *****	***** *****	*****	*****	*****	*****	*****

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Figure 184:



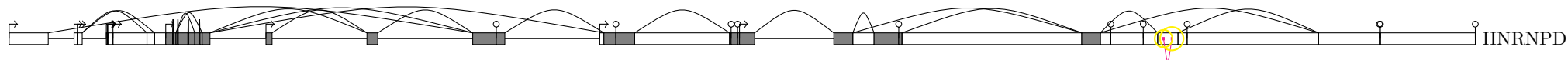
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Figure 185: CS=6.72



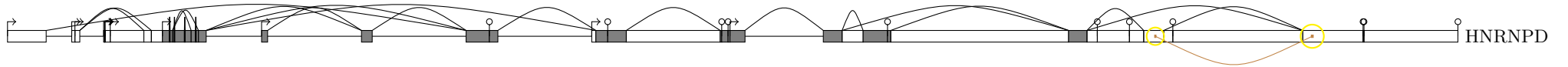
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C. Por	cccgccag	cgggagcttcat...29...attctcacaggcccgtcaa	TGCGGACAGGGT	acgagatgctcacgctctcgaatgctgccgtttg	gtatggtc
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B. Tau	cccgccag	cgggaacttcat...29...attctcacaggcccgtcaa	TGCGGACAGGGT	acgagatgctcacgctctcgaatgctgccgtttg	gtatggtc
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Figure 186:



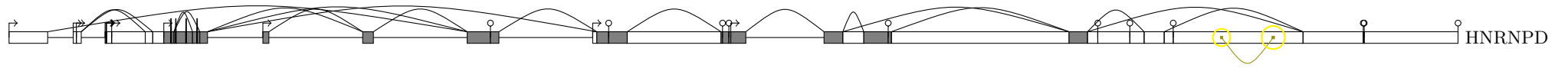
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M. Mus	ccgcccag	cgggaacttcattgcaggccctgtgtcgcgctgacttcacgatttca	CAGGc	CCGCTCAA	atg	cggaacagggtacgagatgctcacgctctcgaatgctgccgtttg	gtatggtc
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C. Por	ccgcccag	cgggaacttcattgcaggccctgtgtcgcgctgacttcacgatttca	CAGGc	CCGCTCAA	atg	cggaacagggtacgagatgctcacgctctcgaatgctgccgtttg	gtatggtc
O. Cun	ccgcccag	cgggaacttcattgcaggccctgtgtcgcgctgacttcacgatttca	CAGGc	CCGCTCAA	atg	cggaacagggtacgagatgctcacgctctcgaatgctgccgtttg	gtatggtc
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L. Afr	ccgcccag	cgggaacttcattgcaggccctgtgtcgcgctgacttcacgatttca	CAGGc	CCGCTCAA	atg	cggaacagggtacgagatgctcacgctctcgaatgctgccgtttg	gtatggtc
	*****	*****	*****	*****	*****	*****	*****

id=208079 gene=ENSG00000138668 name=HNRNPD segment=chr4.83276048.83276154.-1 type=AN

H. Sap	gtctccag	gtggtgaagcagatattttccaatttgaaga-ttcat	TTGA	ag	GTGG	ct	CCTG	ccacctgctaatagcagttc-...238...atccttttgat	aaaaatgt
R. Mac	gtctccag	gtggtgaagcagatattttccaatttgaaga-ttcat	TTGA	ag	GTGG	ct	CCTG	ccacctgctaatagcagttc-...238...atccttttgat	aaaaatgt
P. Tro	gtctccag	gtggtgaagcagatattttccaatttgaaga-ttcat	TTGA	ag	GTGG	ct	CCTG	ccacctgctaatagcagttc-...238...atccttttgat	aaaaatgt
P. Abe	gtctccag	gtggtgaagcagatattttccaatttgaaga-ttcat	TTGA	ag	GTGG	ct	CCTG	ccacctgctaatagcagttc-...238...atccttttgat	aaaaatgt
C. Jac	gtctccag	gtggtgaagcagatattttccaatttgaaga-ttcat	TTGA	ag	GTGG	ct	CCTG	ccacctgctaatagcagttc-...237...atccttttgat	aaaaatgt
M. Mus	gtctccag	gtggtgaagcagatattttccaatttgaaga-ttcat	TTGA	ag	GTGG	ct	CCTG	ccacctgctaatagcagttc-...244...atccttttgat	aaaaatgt
R. Nor	gtctccag	gtggtgaagcagatattttccaatttgaaga-ttcat	TTGA	ag	GTGG	ct	CCTG	ccacctgctaatagcagttc-...240...atccttttgat	aaaaatgt
C. Por	gtctccag	gtggtgaagcagatattttccaatttgaaga-ttcat	TTGA	ag	GTGG	ct	CCTG	ccacctgctaatagcagttc-...238...atccttttgat	aaaaatgc
O. Cun	gtttccag	gtggtgaagcagatattttccaatttgaagatttcat	TTGA	ag	GTGG	ct	CCTG	ccacctgctaatagcagttc-...237...atccttttgat	aaaaatgt
C. Fam	gtctccag	gtggtgaagcagatattttccaatttgaaga-ttcat	TTGA	ag	GTGG	ct	CCTG	ccacctgctaatagcagttc-...239...atccttttgat	aaaaatgt
E. Cab	gtctccag	gtggtgaagcagatattttccaatttgaaga-ttcat	TTGA	ag	GTGG	ct	CCTG	ccacctgctaatagcagttc-...239...atccttttgat	aaaaatgt
S. Sus	gtctccag	gtggtgaagcagatattttccaatttgaaga-ttcat	TTGA	ag	GTGG	ct	CCTG	ccacctgctaatagcagttc-...243...atccttttgat	aaaaatgt
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id=208082 gene=ENSG00000138668 name=HNRNPD segment=chr4.83274987.83275307.-1 type=EN VIEW

Figure 187:



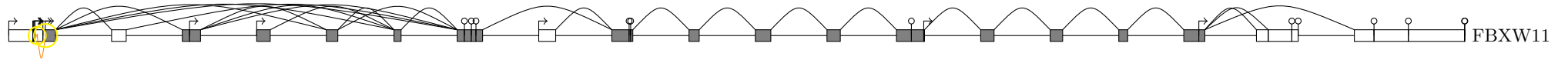
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R. Mac	aaaatgga	tacttcaagctt...210...ttgtagcagtaattgcaaga	AGTTC	TGAGCTGAATT	cCTGTTGTG	acaacttcc---tataattactt...398...ctttgtctccag	gtggtgaa
P. Tro	aaaatgga	tacttcaagctt...210...ttgtagcagtaattgcaaga	AGTTC	TGAGCTGAATT	cCTGTTGTG	acaacttcc---tataattacag...392...ctttgtctccag	gtggtgaa
P. Abe	aaaatgga	tacttcaagctt...210...ttgtagcagtaattgcaaga	AGTTC	TGAGCTGAATT	cCTGTTGTG	acaacttcc---tataattacag...392...ctttgtctccag	gtggtgaa
C. Jac	aaaatgga	tacttcaagctt...211...ttgtagcagtaattgcaaga	AGTTC	TGAGCTGAATT	cCTGTTGTG	acaacttcc-tatataattac--...397...ctttgtctccag	gtggtgaa
M. Mus	aaagtgga	tacttcaagctt...209...ttgtagcagtaattgcaaga	AGTTC	TGAGCTGAATT	cCTGTTGTG	acaactgcc-tatgtatctat--...417...ctttgtctccag	gtggtgaa
R. Nor	aaagtgga	tacttcaagctt...209...ttgtagcagtaattgcaaga	AGTTC	TGAGCTGAATT	cCTGTTGTG	acaactgcc-tatgtatctat--...418...ctttgtctccag	gtggtgaa
C. Por	aaagtgga	tacttcaagctt...210...ttgtagcagtaattgcaaga	AGTTC	TGAGCTGAATT	cCTGTTGTG	acaactccc-tatataatctat--...401...ttctgtctccag	gtggtgaa
O. Cun	aaaatgga	tacttcaagctt...210...ttgtagcagtaattgcaaga	AGTTC	TGAGCTGAATT	cCTGTTGTG	acaacttccttatatatctat--...416...ttttgttccag	gtggtgaa
B. Tau	aaaatgga	tacttcaagctt...209...ttgtagcagtaattgcaaga	AGTTC	TGAGCTGAATT	cCTGTTGTG	acaacttcc-tatataatctat--...413...ctttgtctccag	gtggtgaa
E. Cab	aaaatgga	tacttcaagctt...209...ttgtagcagtaattgcaaga	AGTTC	TGAGCTGAATT	cCTGTTGTG	acaacttcc-tatataatctat--...418...ctttgtctccag	gtggtgaa
S. Sus	aaaatgga	tacttcaagctt...209...ttgtagcagtaattgcaaga	AGTTC	TGAGCTGAATT	cCTGTTGTG	acaacttcc-tatataatctat--...410...ctttgtctccag	gtggtgaa
L. Afr	aaaatgga	tacttcaagctt...211...ttgtagcagtaattgcaaga	AGTTC	TGAGCTGAATT	cCTGTTGTG	acaacttcc-tatataatctat--...414...ctttgtctccag	gtggcgaa
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id=208081 gene=ENSG00000138668 name=HNRNPD segment=chr4.83275308.83275999-1 type=AN

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R. Mac	aaaatgga	tacttcaagctt...480...cacatcttaaaccagtggtg	CACAT	GTGGATTTA	caGCTCATGGACT	ctactgttcagctttaatt...127...ctttgtctccag	gtggtgaa
P. Tro	aaaatgga	tacttcaagctt...476...cacatcttaaaccagtggtg	CACAT	GTGGATTTA	caGCTCATGGACT	ctactgttcagctttaatt...125...ctttgtctccag	gtggtgaa
P. Abe	aaaatgga	tacttcaagctt...476...cacatcttaaaccagtggtg	CACAT	GTGGATTTA	caGCTCATGGACT	ctactgttcagctttaatt...125...ctttgtctccag	gtggtgaa
C. Jac	aaaatgga	tacttcaagctt...482...cagatcttaaaccagtggtg	CACAT	GTGGATTTA	caGCTCATGGACT	ctactgttcagctttaatt...125...ctttgtctccag	gtggtgaa
M. Mus	aaagtgga	tacttcaagctt...497...cacatcttaaaccagtggtg	CACAT	GTGGATTTA	caGCTCATGGACT	ctactgttcagctttaatt...128...ctttgtctccag	gtggtgaa
R. Nor	aaagtgga	tacttcaagctt...498...cacatcttaaaccagtggtg	CACAT	GTGGATTTA	caGCTCATGGACT	ctactgttcagctttaatt...128...ctttgtctccag	gtggtgaa
C. Por	aaagtgga	tacttcaagctt...489...cacatcttaaactagtggtg	CACAT	GTGGATTTA	caGCTCATGGACT	tactgttcagctttaatt...121...ttctgtctccag	gtggtgaa
O. Cun	aaaatgga	tacttcaagctt...498...catatcttaaaccagtggtg	CACAT	GTGGATTTA	caGCTCATGGACT	ctactgttcagctttaatt...127...ttttgttccag	gtggtgaa
B. Tau	aaaatgga	tacttcaagctt...491...cacatcttaaaccagtggtg	CACAT	GTGGATTTA	caGCTCATGGACT	ctactgttcagctttaatt...130...ctttgtctccag	gtggtgaa
E. Cab	aaaatgga	tacttcaagctt...495...cacatcttaaaccagtggtg	CACAT	GTGGATTTA	caGCTCATGGACT	ctactgttcagctttaatt...131...ctttgtctccag	gtggtgaa
S. Sus	aaaatgga	tacttcaagctt...486...cacatcttaaactcatgggtg	CACAT	GTGGATTTA	caGCTCATGGACT	ctactgttcagctttaatt...132...ctttgtctccag	gtggtgaa
L. Afr	aaaatgga	tacttcaagctt...494...cacatcttaaaccagtggtg	CACAT	GTGGATTTA	caGCTCATGGACT	ctactgttcagctttaatt...130...ctttgtctccag	gtggcgaa
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id=208081 gene=ENSG00000138668 name=HNRNPD segment=chr4.83275308.83275999-1 type=AN VIEW

Figure 188:



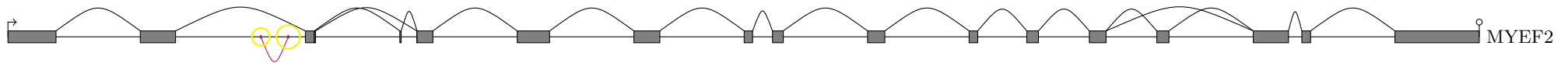
H. Sap	gggcggag	ctgccGGCGG-CCCGGGCGGG	ctggcagctagagtgggtg	cgatagccgcctccgcctctg	ccgcctccgcc	gtcgcctc
R. Mac	gggcggag	ctgccGGCGG-CCCGGGCGGG	ctggcagctagagtgggtg	cgatagccgcctccgcctctg	ccgcctccgcc	gtcgcctc
P. Tro	gggcggag	ctgccGGCGG-CCCGGGCGGG	ctggcagctagagtgggtg	cgatagccgcctccgcctctg	ccgcctccgcc	gtcgcctc
P. Abe	gggcggag	ctgccGGCGG-CCCGGGCGGG	ctggcagctagagtgggtg	cgatagccgcctccgcctctg	ccgcctccgcc	gtcgcctc
C. Jac	gggcggag	ctgccGGCGG-CCCGGGCGGG	ctggcagctagagtgggtg	cgatagccgcctccgcctctg	ccgcctccgcc	gtcgcctc
M. Mus	gggcggag	ctGGCGG-CCCGGGCGGG	ctggcagctagagtgggtg	cgagagctgcctccacc--g	ccgcctccgcc	accgcctc
R. Nor	gggcggag	ctgccGGCGG-CCCGGGCGGG	ctggcagctagagtgggtg	cgagagctgcctccacc--g	ccgcctccgcc	accgcctc
C. Por	gggcggag	ctgccGGCGG-CCCGGGCGGG	ctggcagctagagtgggtg	cgagagccgcctccgcctctg	ccgcctccgcc	gtcgcctc
O. Cun	gggcggag	ctgccGGCGG-CCCGGGCGGG	ctggcagctagagtgggtg	cgagagccgcctccgcctctg	ccgcctccgcc	gtcgcctc
C. Fam	gggcggag	ctgccGGCGG-CCCGGGCGGG	ctggcagctagagtgggta	agatagccgcctccgcctctg	ccgcctccgcc	gtcgcctc
F. Cat	gggcggag	ctgccGGCGG-CCCGGGCGGG	ctggcagctagagtgggtg	cgatagccgcctccgcctctg	ccgcctccgcc	gtcgcctc
B. Tau	gggcggag	ctgccGGCGG-CCCGGGCGGG	ctggcagcgagagtgggtg	cgagagccgcctccgcctctg	ccgcctccgcc	gtcgcctc
E. Cab	gggcggag	ctgccGGCGG-CCCGGGCGGG	ctggcagctagagtgggtg	cgagagccgcctccgcctctg	ccgcctccgcc	gtcgcctc
S. Sus	gggcggag	ctgccGGCGG-CCCGGGCGGG	ctggcagctagagtgggtg	cgatagccgcctccgcctctg	ccgcctccgcc	gtcgcctc
O. Avi	gggcggag	ctgccGGCGG-CCCGGGCGGG	ctggcagcgagagtgggtg	cgagagccgcctccgcctctg	ccgcctccgcc	gtcgcctc
	*****	*** **	*****	*****	* ** * ** * **	***** * **

id=666533 gene=ENSG0000072803 name=FBXW11 segment=chr5_171433574.171433644_-1 type=E5

H. Sap	cctccgcc	gtcgcctcc	TCCGCCGGGCC	GTTcgctg
R. Mac	cctccgcc	gtcgcctcc	TCCGCCGGGCC	GTTcgctg
P. Tro	cctccgcc	gtcgcctcc	TCCGCCGGGCC	GTTcgctg
P. Abe	cctccgcc	gtcgcctcc	TCCGCCGGGCC	GTTcgctg
C. Jac	cctccgcc	gtcgcctcc	TCCGCCGGGCC	GTTcgctg
M. Mus	ccgcctcc	accgcctcc	TCCGCCGGGCC	GaTCGTg
R. Nor	ccgcctcc	accgcctcc	TCCGCCGGGCC	GTTcgctg
C. Por	cctccgcc	gtcgcctcc	TCCGCCGGGCC	GTTcgctg
O. Cun	cctccgcc	gtcgcctcc	TCCGCCGGGCC	GTTcgctg
C. Fam	cctccgcc	gtcgcctcc	TCCGCCGGGCC	GTTcgctg
F. Cat	cctccgcc	gtcgcctcc	TCCGCCGGGCC	GTTcgctg
B. Tau	cctccgcc	gtcgcctcc	TCCGCCGGGCC	GTTcgctg
E. Cab	cctccgcc	gtcgcctc	TCCGCCGGGCC	GTTcgctg
S. Sus	cctccgcc	gtcgcctcc	TCCGCCGGGCC	GTTcgctg
O. Avi	cctccgcc	gtcgcctcc	TCCGCCGGGCC	GTTcgctg
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id=666534 gene=ENSG0000072803 name=FBXW11 segment=chr5_171433553.171433573_-1 type=EN VIEW

Figure 189:



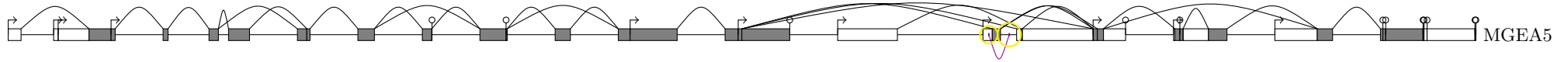
H. Sap	agagaaaag	gtaactatctct...919...at	ttgtatgtatatgtgcat	TTGTTACCAAC	tatatcatgctggccaaaat...234...tgtcttatgtag	ttggtgag
R. Mac	agagaaaag	gtaactatctct...921...at	ttgtatgtatatgtgcat	TTGTTACCAAC	tatatcatgctggccaaaat...234...tgtcttatgtag	ttggtgag
P. Tro	agagaaaag	gtaactatctct...919...at	ttgtatgtatatgtgcat	TTGTTACCAAC	tatatcatgctggccaaaat...233...tgtcttatgtag	ttggtgag
P. Abe	agagaaaag	gtaactatctct...920...at	ttgtatgtatatgtgcat	TTGTTACCAAC	tatatcatgctggccaaaat...233...tgtcttatgtag	ttggtgag
C. Jac	agagaaaag	gtaactatctct...917...at	ttgtatgtatatgtgcat	TTGTTACCAAC	tatatcatgctggccaaaat...232...tgtcttatgtag	ttggtgag
C. Por	agaaaaag	gtaagtgtctca...909...at	tcgtatgtatatgtgcat	TTGTTACCAAC	tatatcatgctggccaaaat...233...tgtcttatgtag	tcggtgag
O. Cun	agaaaaag	gtaactatctct...918...at	ttgtatgtatatgtgcat	TTGTTACCAAC	tatatcatgctggccaaaat...238...tgtcttatgtag	ttggtgag
C. Fam	agaaaaag	gtaaccatccct...922...tt	gttatgtatatgtgcat	TTGTTACCAAC	tatatcatgctggccaaaat...237...tgtcttatgtag	ttggtgag
F. Cat	agaaaaag	gtaaccattcct...1602...at	ttgtatgtatatgtgcat	TTGTTACCAAC	tatatcatgctggccaaaat...232...tgtcttatgtag	tcggtgag
B. Tau	agaaaaag	gtaactatctct...925...tt	ttgtatgtatatgtgcat	TTGTTACCAAC	tatatcatgctggccaaaat...233...tgtcttatgtag	ttggtgag
E. Cab	agaaaaag	gtaaccagctct...924...at	ttgtatgtatatgtgcat	TTGTTACCAAC	tatatcatgctggccaaaat...232...tgtcttatgtag	ttggtgag
S. Sus	agaaaaag	gtaactatctct...920...at	ttgtatgtatatgtgcat	TTGTTACCAAC	tatatcatgctggccaaaat...232...tgtcttatgtag	ttggtgag
L. Afr	agagaaaag	gtagctgtctct...928...act	gtatgtatatgtgcat	TTGTTACCAAC	tatatcatgctggccaaaat...232...tgtcttatgtag	ttggtgag
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id=452909 gene=ENSG00000104177 name=MYEF2 segment=chr15.48459599.48460827_-1 type=IN

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R. Mac	agagaaaag	gtaactatctct...1084...at	gttggctctggttttgatt	GTTGGTGAATAA	taggtgcttctctgtagagt...71...tgtcttatgtag	ttggtgag
P. Tro	agagaaaag	gtaactatctct...1081...at	gttggctctggttttgatt	GTTGGTGAATAA	taggtgcttctctgtagagt...71...tgtcttatgtag	ttggtgag
P. Abe	agagaaaag	gtaactatctct...1082...at	gttggctctggttttgatt	GTTGGTGAATAA	taggtgcttctctgtagagt...71...tgtcttatgtag	ttggtgag
C. Jac	agagaaaag	gtaactatctct...1079...at	gttggctctggttttgatt	GTTGGTGAATAA	taggtgcttctctgtagagt...70...tgtcttatgtag	ttggtgag
C. Por	agaaaaag	gtaagtgtctca...1071...at	gttggctctggttttgatt	GTTGGTGAATAA	taggtgcttctctgtagagt...71...tgtcttatgtag	tcggtgag
O. Cun	agaaaaag	gtaactatctct...1085...at	gttggctctggttttgatt	GTTGGTGAATAA	taggtgcttctctgtagagt...71...tgtcttatgtag	ttggtgag
C. Fam	agaaaaag	gtaaccatccct...1088...at	gttggctctggttttgatt	GTTGGTGAATAA	taggtgcttctctgtagagt...71...tgtcttatgtag	ttggtgag
F. Cat	agaaaaag	gtaaccattcct...1763...at	gttggctctggttttgatt	GTTGGTGAATAA	taggtgcttctctgtagagt...71...tgtcttatgtag	tcggtgag
B. Tau	agaaaaag	gtaactatctct...1087...at	gttggctctggttttgatt	GTTGGTGAATAA	taggtgcttctctgtagagt...71...tgtcttatgtag	ttggtgag
E. Cab	agaaaaag	gtaaccagctct...1085...at	gttggctctggttttgatt	GTTGGTGAATAA	taggtgcttctctgtagagt...71...tgtcttatgtag	ttggtgag
S. Sus	agaaaaag	gtaactatctct...1081...at	gttggctctggttttgatt	GTTGGTGAATAA	taggtgcttctctgtagagt...71...tgtcttatgtag	ttggtgag
L. Afr	agagaaaag	gtagctgtctct...1089...at	gttggctctggttttgatt	GTTGGTGAATAA	taggtgcttctctgtagagt...71...tgtcttatgtag	ttggtgag
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Figure 191:



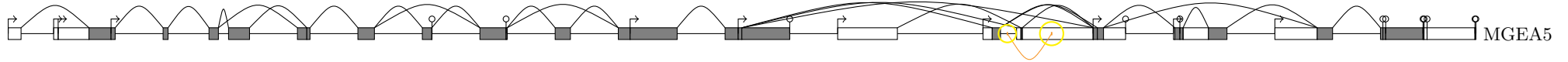
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R. Mac	gttagaga	gctatttccacgaagtgtttgtcagtttgttgga-	tttgagacc	CAGGaAATCC	ccTTTCTCGT	aacgttctccgcttgatctgatctcaacag	ggtgtcgt
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C. Jac	gttagaga	gctatttccacgaagtgtttgtcagtttgttgga-	tttgagacc	CAGGaAATCC	ccTTTCTCGT	aacgttctccgcttgatctgatctcaacag	ggtgtcgt
M. Mus	tttagaga	gctatttcc---agtatgtgttagtttgttgga-	tttgagacc	CAGGaAATCC	ccTTTCTCGT	aacgttctccgcttgatctgatctcaacag	ggtgtcgt
R. Nor	tttagaga	gctatttcc---agtggtgttagtttgttgga-	tttgagacc	CAGGaAATCC	ccTTTCTCGT	aacgttctccgcttgatctgatctcaacag	ggtgtcgt
C. Por	gttagaga	gctatttccac---agtggtgttagtttgttgga-	tttgagacc	CAGGaAATCC	ccTTTCTCGT	aacgttctccgcttgatctgatctcaacag	ggtgtcgt
O. Cun	gttagaga	gctatatccacaaagtgtttgttagtttgttgga-	tttgagacc	CAGGaAATCC	ccTTTCTCGT	aacgttctccgcttgatctgatctcaacag	ggtgtcgt
C. Fam	gttagaga	gctatttccacgaagtgtttgttagtttgttgga-	tttgagacc	CAGGaAATCC	ccTTTCTCGT	aacgttctccgcttgatctgatctcaacag	ggtgtcgt
F. Cat	gttagaga	gttatttccacaaagtgtttgttagtttgttgga-	tttgagacc	CAGGaAATCC	ccTTTCTCGT	aacgttctccgcttgatctgatctcaacag	ggtgtcgt
B. Tau	gttagaga	gctgtttccac---agtggtgttagtttgttgga-	tttgagacc	CAGGaAATCC	ccTTTCTCGT	aacgttctccgcttgatctgatctcaacag	ggtgtcgt
E. Cab	gttagaga	gctatttccacaaagtgtttgttagtttgttgga-	tttgagacc	CAGGaAATCC	ccTTTCTCGT	aacgttctccgcttgatctgatctcaacag	ggtgtcgt
S. Sus	gttagaga	gctatttccacaaagtgtttgttagtttgttgga-	tttgagacc	CAGGaAATCC	ccTTTCTCGT	aacgttctccgcttgatctgatctcaacag	ggtgtcgt
O. Avi	gttagaga	gctgtttccac---agtggtgttagtttgttgga-	tttgagacc	CAGGaAATCC	ccTTTCTCGT	aacgttctccgcttgatctgatctcaacag	ggtgtcgt
L. Afr	gttagaga	gctagtccacaaagtgtttgttagtttgttgga-	tttgagacc	CAGGaAATCC	ccTTTCTCGT	aacattctccgcttgatctgatctcaacag	ggtgtcgt
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R. Mac	agttccag	gtagcaaatatga...38...aaccttatgttgcgcacatcag	ATGGctGGAAGGATT	ggTCTG	cgaaggctttctagtcca...45...cctctttcacag	taatttct
P. Tro	agttccag	gtagcaaatatga...38...aaccttatgttgcgcacatcag	ATGGctGGAAGGATT	ggTCTG	cgaaggctttctagtcca...45...cctctttcacag	taatttct
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Figure 192:



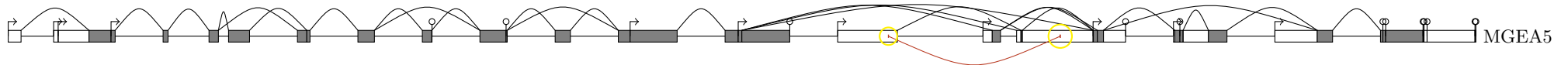
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Figure 193:



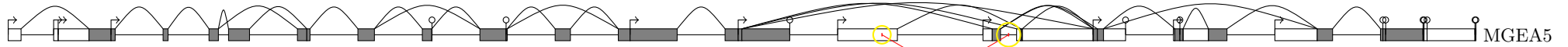
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Figure 196: CS=4.5



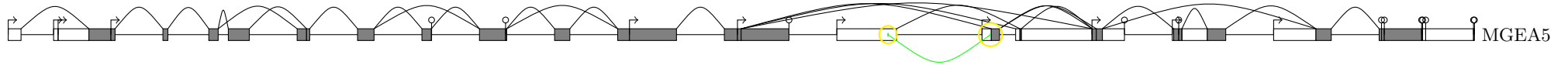
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B. Tau	agttccag	gtatcaaatatga...31...	tatgaga	aacctt	atgttgc	GCATca	GATGGct	GGAAGGAT	tggtctg	cccaaggc	tttct...51...	cctctttc	acag	taatttct
E. Cab	agttccag	gtatcaaatatga...31...	tatgaga	aatcct	atgttgc	GCATca	GATGGct	GGAAGGAT	tggtctg	cccaaggc	tttct...52...	cctctttc	acag	taatttct
S. Sus	agttccag	gtatcaaatatga...31...	tatgaga	aacctt	atgttgc	GCATca	GATGGct	GGAAGGAT	tggtctg	cccaaggc	tttct...51...	cctctttc	acag	taatttct
L. Afr	agttccag	gtatcaaatatga...31...	tatgaga	aacctt	atgttgc	GCATca	GATGGct	GGAAGGAT	tggtctg	cccaaggc	tttct...51...	cctctttc	acag	taatttct
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id=370601 gene=ENSG00000198408 name=MGEA5 segment=chr10_103553502_103553669_-1 type=IN VIEW

Figure 197: CS=4.5



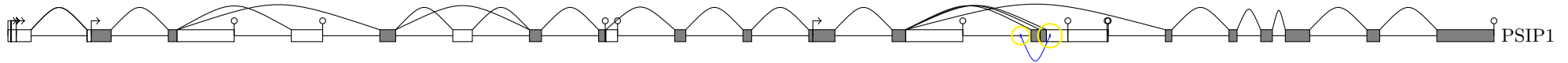
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R.Mac	cactaagc	atztatggtggt...491...	tactattggatggacagcgg	CAGAtg	TTCAcAGCG	cgatcatgattaattagttta...56...	actgaagtcac	gtttgcg
P.Tro	cactgagc	atztatggtggt...484...	tactattggatggacagcgg	CAGAtg	TTCAcAGCG	cgatcatgattaattagttta...56...	actgaagtcac	gtttgcg
P.Abe	cactaagc	atztatggtggt...497...	tactattggatggacagcgg	CAGAtg	TTCAcAGCG	cgatcatgattaattagttta...56...	actgaagtcac	gtttgcg
C.Jac	cattatgc	atztatggtgga...509...	tactattggatggacagcgg	CAGAtg	TTCAcAGCG	cgatcatgattaattagttta...56...	actgaagtcac	gtttgcg
M.Mus	ctttaggc	agcagtgagggt...269...	tgctattggatggacagcgg	CAGAtg	TTCAcAGCG	cgatcatgattaattagttta...60...	actgaagtcac	gtttgcg
R.Nor	ccctaggc	agcagtgagggt...254...	tactattggatggacagcgg	CAGAtg	TTCAcAGCG	cgatcatgattaattagtttt...61...	actgaagtcac	gtttgcg
C.Por	gattatac	aattatagggtt...302...	tactattggatggacagcgg	CAGAtg	TTCAcAGCG	cgatcatgattaattagttta...52...	actgaagtcac	gtttgcg
O.Cun	tactgtgc	aattatgggggt...306...	tactattggatggacagcgg	CAGAtg	TTCAcAGCG	cgatcatgattaattagttta...56...	actgaagtcac	gtttgcg
C.Fam	tactgtgc	aaatattggggc...306...	tactattggatggacagcgg	CAGAtg	TTCAcAGCG	cgatcatgattaattagttta...52...	actgaagtcac	gtttgcg
F.Cat	tactgtgc	aattataggagc...307...	tactattggatggacagcgg	CAGAtg	TTCAcAGCG	cgatcatgattaattagttta...51...	actgaagtcac	gtttgcg
B.Tau	aactgtgc	agttctaggggc...300...	tactattggatggacagcgg	CAGAtg	TTCAcAGCG	cgatcatgattaattagttta...52...	actgaagtcac	gtttgcg
E.Cab	tactgtgc	aattatggagggt...307...	tactattggatggacagcgg	CAGAtg	TTCAcAGCG	cgatcatgattaattagttta...56...	actgaagtcac	gtttgcg
S.Sus	tactgtgt	aattatgagggt...302...	tactattggatggacagcgg	CAGAtg	TTCAcAGCG	cgatcatgattaattagttta...52...	actgaagtcac	gtttgcg
L.Afr	ttttatgc	agttacgggggt...307...	tgctattggatggacagcgg	CAGAtg	TTCAcAGCG	cgatcatgattaattagttta...56...	actgaagtcac	gtttgcg
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id=370597 gene=ENSG00000198408 name=MGEA5 segment=chr10_103555086_103555708_-1 type=AN

H.Sap	gttagaga	gttattccacg...43...	ccctttctcgtaacgttctc	CGCTTGGATCTG	atctcaacag	ggtgtcgt
R.Mac	gttagaga	gctattccacg...43...	ccctttctcgtaacgttctc	CGCTTGGATCTG	atctcaacag	ggtgtcgt
P.Tro	gttagaga	gttattccacg...43...	ccctttctcgtaacgttctc	CGCTTGGATCTG	atctcaacag	ggtgtcgt
P.Abe	gttagaga	gctattccacg...43...	ccctttctcgtaacgttctc	CGCTTGGATCTG	atctcaacag	ggtgtcgt
C.Jac	gttagaga	gctattccacg...43...	ccctttctcgtaacgttctc	CGCTTGGATCTG	atctcaacag	ggtgtcgt
M.Mus	ttagaga	gctattccagt...39...	ccctttctcgtaacgttctc	CGCTTGGATCTG	atctcaacag	ggtgtcgt
R.Nor	ttagaga	gctattccagt...40...	ccctttctcgtaacgttctc	CGCTTGGATCTG	atctcaacag	ggtgtcgt
C.Por	gttagaga	gctattccaca...41...	ccctttctcgtaacgttctc	CGCTTGGATCTG	atctcaacag	ggtgtcgt
O.Cun	gttagaga	gctatatccaca...43...	ccctttctcgtaacgttctc	CGCTTGGATCTG	atctcaacag	ggtgtcgt
C.Fam	gttagaga	gctattccacg...43...	ccctttctcgtaacgttctc	CGCTTGGATCTG	atctcaacag	ggtgtcgt
F.Cat	gttagaga	gttattccaca...43...	ccctttctcgtaacgttctc	CGCTTGGATCTG	atctcaacag	ggtgtcgt
B.Tau	gttagaga	gctgtttccaca...41...	ccctttctcgtaacgttctc	CGCTTGGATCTG	atctcaacag	ggtgtcgt
E.Cab	gttagaga	gctattccaca...43...	ccctttctcgtaacgttctc	CGCTTGGATCTG	atctcaacag	ggtgtcgt
S.Sus	gttagaga	gctattccaca...43...	ccctttctcgtaacgttctc	CGCTTGGATCTG	atctcaacag	ggtgtcgt
L.Afr	gttagaga	gctagtccaca...43...	ccctttctcgtaacattctt	CGCTTGGATCTG	atctcaacag	ggtgtcgt
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Figure 198: CS=4.5



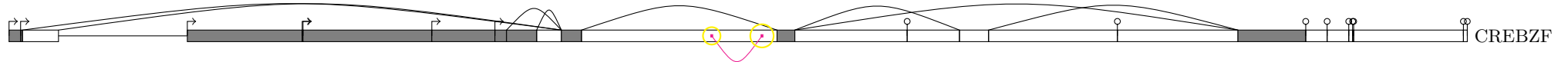
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R. Mac	gatagaga	ccatacttgcca-----	... 621...	-----c	tttagtatcttaaagttaa-	CTTTATGTATTC	agTTTC	ttttg	aatgtcctccaatgtaactttctcaaattcta	aatttg	gtttttc	tttcctt	ctcctg	tattacaaa	actttg	tacttgg	acag	ttttg	ctc
P. Tro	cttagaga	cagtacttgcca-----	... 628...	-----c	tttagtatcttaaagttat-	CTTTATGTATTC	agTTTC	ttttg	aatgtcctccaatgtaactttctcaaattcta	aatttg	gtttttc	tttcctt	ctcctg	tattacaaa	actttg	tacttgg	acag	ttttg	ctc
P. Abe	cttagaga	cagtacttgcca-----	... 622...	-----c	tttagtatcttaaagttat-	CTTTATGTATTC	agTTTC	ttttg	aatgtcctccaatgtaactttctcaaattcta	aatttg	gtttttc	tttcctt	ctcctg	tattacaaa	actttg	tacttgg	acag	ttttg	ctc
C. Jac	cttagaga	cagtacttgcca-----	... 653...	-----g	taactttctcaaattctaa	TATTTGTGTTTTC	TTTC	-----	-----	-----	-----	-----	-----	cttctc	ctgttatt	acaaa	actttg	tacttgg	acag
M. Mus	--tgg--	--atagatacttaccatga...	... 508...	-----t	cttcagaatctcaagatat-	CTTTTGTATTC	agTTTC	ttttg	aatgtcctccaatgtaactttctcaaattcta	aatttg	gtttttc	tttcctt	ctcctg	tattacaaa	actttg	tacttgg	acag	ttttg	ctc
C. Por	tgtatata	cagtatttactt-----	... 560...	-----t	tttaatatctcaaagtta-	TCTATaTGTATTC	aTTTC	ttttg	aatgtcctccaatgtaacttctcaaattcta	aatttg	gtttttc	tttcctt	ctcctg	tattacaaa	actttg	tacttgg	acag	ttttg	ctc
O. Cun	tttggaga	caatatatactt-----	... 608...	-----g	taactttctcaaattctaa	TATTTGTGTTTTC	TTTC	-----	-----	-----	-----	-----	-----	cttctc	ctgttatt	acaaa	actttg	tacttgg	acag
C. Fam	tttgaga	caatatatactt-----	... 686...	-----g	taactttctcaaattctaa	TATTTGTGTTTTC	TTTC	-----	-----	-----	-----	-----	-----	cttctc	ctgttatt	acaaa	actttg	tacttgg	acag
F. Cat	cttggaga	caatacgcactt-----	... 1060...	-----g	taactttctcaaattctaa	TATTTGTGTTTTC	TTTC	-----	-----	-----	-----	-----	-----	cttctc	ctgttatt	acaaa	actttg	tacttgg	acag
B. Tau	--tgcaga	taatatacttac-----	... 685...	-----g	taactttctcaaattctaa	TATTTGTGTTTTC	TTTC	-----	-----	-----	-----	-----	-----	cttctc	ctgttatt	acaaa	actttg	tacttgg	acag
E. Cab	cttgaga	caacatactt-----	... 683...	-----g	taactttctcaaattctaa	TATTTGTGTTTTC	TTTC	-----	-----	-----	-----	-----	-----	cttctc	ctgttatt	acaaa	actttg	tacttgg	acag
S. Sus	--tggaaa	ccatgta-acttaca-----	... 680...	-----g	taactttctcaaattctaa	TATTTGTGTTTTC	TTTC	-----	-----	-----	-----	-----	-----	cttctc	ctgttatt	acaaa	actttg	tacttgg	acag
L. Afr	ttgaaaga	tagtatacactt-----	... 651...	ccgaatg	taactttctcaa	TTCTaa	TATTTGTGTTTTC	TTTC	-----	-----	-----	-----	-----	cttctc	ctgttatt	acaaa	actttg	tacttgg	acag
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id=623721 gene=ENSG00000164985 name=PSIP1 segment=chr9_15471310_15472078_-1 type=IN

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R. Mac	gctcaaag	cattaatccagttact	GAAAaGAGAaTACAag	TGGAG	caaacaagagatgaagatct--	... 121...	atgtaaggtaca	cactacat
P. Tro	gctcaaag	cattaatccagttact	GAAAaGAGAaTACAag	TGGAG	caaacaagagatgaagatct--	... 118...	ctgtaaggtaca	cactacat
P. Abe	gctcaaag	cattaatccagttact	GAAAaGAGAaTACAag	TGGAG	caaacaagagatgaagatct--	... 121...	ctgtaaggtaca	cactacat
C. Jac	gctcaaag	cattaatccagttact	GAAAaGAGAATACAAGTG	gagcaacaagagatgaaga----	... 123...	ctggaaggtaca	cactacat	
M. Mus	gctcaaag	cattaatccagtaact	GAAAaGAGAaTACAAGTGGAG	catacaagcgatgaagatct--	... 126...	ctgtaaggtaca	cactacat	
C. Por	gctcaaag	cattaatccagttact	GAAAAGAGAaTACAaGTGGAG	gcaacaagagatgaagatc---	... 124...	ttgtaaggtaca	cactacat	
O. Cun	gctcaaag	cattaatccagttact	GAAAAGAGAATACAAGTG	gagcaacaagagatgaaga----	... 129...	ctgtaaggtaca	cactacat	
C. Fam	gctcaaag	cattaatccagttact	GAAAAGAGAATACAAGTG	gagcaacaagagatgaaga----	... 128...	ctgtaaggtaca	cactacat	
F. Cat	gctcaaag	cattaatccagttact	GAAAAGAGAATACAAGTG	gagcaacaagagatgaaga----	... 136...	ctgtaaggtaca	cactacat	
B. Tau	gctcaaag	cattaatccagttact	GAAAAGAGAATACAAGTG	gagcaacaagagatgaaga----	... 126...	ctgtaaggtaca	cactacat	
E. Cab	gctcaaag	cattaatccagttact	GAAAAGAGAATACAAGTG	gagcaacaagagatgaaga----	... 130...	ctgtaaggtaca	cactacat	
S. Sus	gctcaaag	cattaatccagttact	GAAAAGAGAATACAAGTG	gagcaacaagagatgaaga----	... 125...	ctgtaaggtaca	cactacat	
L. Afr	gctcaaag	cattaatccagttact	GAAAaGAGAATACAAGTG	AGGAaacaagcgatgaagatcttg...	... 118...	ctgtaaggtaca	cactacat	
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id=623724 gene=ENSG00000164985 name=PSIP1 segment=chr9_15470988_15471174_-1 type=AN VIEW

Figure 199: CS=4.2



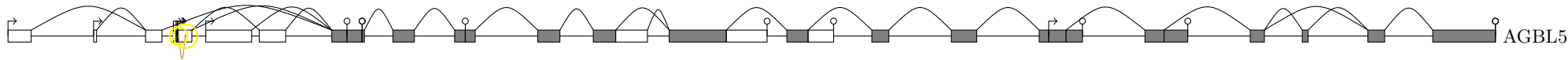
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R. Mac	acaacctg	gtaaggatccat...762...	gaaaacgtgtaaagtgaggc-----	TTCACAAAGAATCTTA	-----	ttctctgtatttcaaaagta--...223...	tttgtgctaaag	tggataca
P. Tro	acaacctg	gtaaggatccat...765...	gaaaacgtgtaaagtgaggc-----	TTCACAAAGAATCTTA	-----	ttctc--tgtttcaaaagtatt...218...	tttgtgctaaag	tggataca
P. Abe	acaacctg	gtaaggatccat...767...	gaaaacgtgtaaagtgaggc-----	TTCACAAAGAATCTTA	-----	ttctctgtgtttcaaaagta--...223...	tttgtgctaaag	tggataca
C. Jac	acaacctg	gtaaggatccat...763...	gaaaacgtgtaaagtgaggc-----	TTCACAAAGAATCTTA	-----	ttctctgtatttcaaaagta--...223...	tttgtgctaaag	tggataca
M. Mus	acaacctg	gtaaggatccat...760...	gaaaacatgtaaagtgaggc-----	TTCACAAAGAAT	-----	ctttctccatatttctaaa--...211...	tttgtgctaaag	tggataca
R. Nor	acaacctg	gtaaggatccat...756...	gaaaacatgtaaagtgaggc-----	TTCACAAAGAAT	-----	cttctccatatttctaaaac--...198...	tttgtgctaaag	tggataca
C. Por	acaacctg	gtaaggatccat...765...	gaaaacgtgtaaagtgaggc-----	TTCACAAAGAATCTTAAT	-----	tactctgtattttaaagtat--...223...	tttgtgctaaag	tggataca
O. Cun	acaacctg	gtaaggatccat...786...	gaaaacatgtaaagtgaggc-----	TTCACAAAGAATcTTATATTTTC	-----	aagagtatttgcctattta--...218...	tttgtgctaaag	tggataca
C. Fam	acaacctg	gtaaggatccat...789...	gaaaacatgtaaagtgaggc-----	TTCACAAAGAATCTTA	-----	ctactctccttatttcaagg--...232...	tttgtgctaaag	tggataca
B. Tau	accacctg	gtaaggacccat...783...	gaaaacgtgtaaagtgaggc-----	TTCACAAAGAATCTT	-----	actctccatatttcaaaagt--...226...	tttgtgctaaag	tggataca
E. Cab	acaacctg	gtaaggatccat...777...	gaaaacgtgtaaagtgaggc-----	TTCACAAAGAATCTTA	-----	ttctccatattttaaactgat--...230...	tttgtgctaaag	tggataca
S. Sus	acaacctg	gtaaggatccat...761...	gaaa--tgtgaatgaaaacgtgTAAAGTGA	gTTTCACAAAGAATCTTA	-----	ttttccatattttaaactctt--...222...	tttgtgctaaag	tggataca
O. Avi	accacctg	gtaaggacccat...787...	gaaaacgtgtaaagtgaggc-----	TTCACAAAGAATCTT	-----	actctccatatttcaaaagt--...225...	tttgtgctaaag	tggataca
L. Afr	acaacctg	gtaaggatccat...783...	gaagaagtgtaaagtgaggc-----	TTCACAAAGAATCTTAATTGTTcTTAT	-----	tcaaaagcatttggcctatt--...219...	tttgtgctaaag	tggataca
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id=177273 gene=ENSG0000137504 name=CREBZF segment=chr11.85373502.85374567_-1 type=AN

H. Sap	acaacctg	gtaaggatccat...956...	-----tccttcagtgtaagaggcatTAAGA	aATTCTTTGTGAA	acatcactgcttgataaagtataacgtatttagcatccttggttttctt	tttgtgctaaag	tggataca	
R. Mac	acaacctg	gtaaggatccat...955...	-----tccttcagtgtaagaggcatTAAGA	aATTCTTTGTGAA	acatcactgcttgataaagtataacgtatttagcatccttggttttctt	tttgtgctaaag	tggataca	
P. Tro	acaacctg	gtaaggatccat...953...	-----tccttcagtgtaagaggcatTAAGA	aATTCTTTGTGAA	acatcactgcttgataaagtataacgtatttagcatccttggttttctt	tttgtgctaaag	tggataca	
P. Abe	acaacctg	gtaaggatccat...960...	-----tccttcagtgtaagaggcatTAAGA	aATTCTTTGTGAA	acatcactgcttgataaagtataacgtatttagcatccttggttttctt	tttgtgctaaag	tggataca	
C. Jac	acaacctg	gtaaggatccat...956...	-----tccttcagtgtaagaggcatTAAGA	aATTCTTTGTGAA	acatcactgcttgataaagtataacgtatttagcatccttggttttctt	tttgtgctaaag	tggataca	
M. Mus	acaacctg	gtaaggatccat...943...	-----tgaaatgcaagag-acattaa-ATTCTTTGTGAA	acatcactgcttgataaaggatataacgtatttagcatccttggttttctt	tttgtgctaaag	tggataca		
R. Nor	acaacctg	gtaaggatccat...926...	-----aaatgcaagagatatattaa-ATTCTTTGTGAA	acatcactgcttgataaaggatatacgtatttagcatccttggttttctt	tttgtgctaaag	tggataca		
C. Por	acaacctg	gtaaggatccat...958...	-----tgctcctcattataaggggcATTAAAGA	aATTCTTTGTGAA	acatcactgcttgataaagtataacgtatttagcatccttggttttctt	tttgtgctaaag	tggataca	
O. Cun	acaacctg	gtaaggatccat...977...	-----tatggtgtccttcggtgtaa--GAAGTAT	TAAATCTTTGTGAA	acgtcactgcttgataaagtataacgtatttagcatccttggttttctt	tttgtgctaaag	tggataca	
C. Fam	acaacctg	gtaaggatccat...991...	-----tccttcagtgtaagaggcatTAAGA	aATTCTTTGTGAA	acatcactgcttgataaagtataacgtatttagcatccttggttttctt	tttgtgctaaag	tggataca	
B. Tau	accacctg	gtaaggacccat...979...	-----ccttcagtgtaagaggcatTAAGA	aATTCTTTGTGAA	acatcactgcttgataaagtataacgtatttagcatccttggttttctt	tttgtgctaaag	tggataca	
E. Cab	acaacctg	gtaaggatccat...977...	-----tccttcagtgtaagaggcatTAAGA	aATTCTTTGTGAA	acatcactgcttgataaagtataacgtatttagcatccttggttttctt	tttgtgctaaag	tggataca	
S. Sus	acaacctg	gtaaggatccat...964...	-----tccttcagtgtaagaggcatTAAGA	aATTCTTTGTGAAaTCAC	tgTTGataaagtataacgtatttagcatccttggttttctt	tttgtgctaaag	tggataca	
O. Avi	accacctg	gtaaggacccat...982...	-----tccttaatgtacgggacatgAAGA	aATTCTTTGTGAA	acatcactgcttgataaagtataacgtatttagcatccttggttttctt	tttgtgctaaag	tggataca	
L. Afr	acaacctg	gtaaggatccat...972...	gagttatggtgtccttcagtGTAAGACA	cATTAAAGA	aATTCTTTGTGAA	acatcactgcttgataaagtataacgtatttagcatccttggttttctt	tttgtgctaaag	tggataca
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id=177273 gene=ENSG0000137504 name=CREBZF segment=chr11.85373502.85374567_-1 type=AN VIEW

Figure 200: CS=9



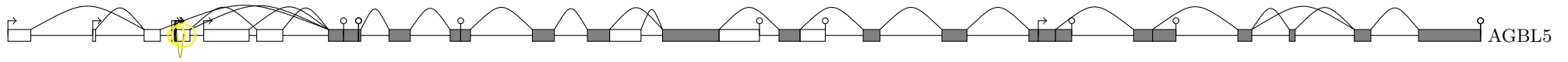
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R.Mac	gGGGT	CCC	GGCACC	-----	gcggcgctcgggtgtttttg...75...	gcccggagagag	gtgagggg	
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P.Abe	gGGGT	CCC	GGCACC	-----	gcggcgctcgggtgtttttg...75...	gcccagagagag	gtgagggg	
M.Mus	gGGGT	CCC	GGCACC	gcGGCTCTCTG	gtTTGT	gtgggtcccgggtggaggg-...58...	gcccggagagag	gtgagggg
R.Nor	gGGGT	CCC	GGCACC	gcGGCTCTCTG	gtTTGT	gtgggtcccgggtggaggg-...58...	gcccggagagag	gtgagggg
C.Por	gGGGT	CCC	GGCACC	-----	gcggcgctcgggtgtttttg...75...	gtccagagagag	gtgagggg	
O.Cun	gGGGT	CCC	GGCACC	-----	gcggcgctcgggtgtttttg...75...	gcccggagagag	gtgagggg	
C.Fam	gGGGT	CCC	GGCACC	-----	gcggcgctcgggtgtttttg...75...	gcccggagagag	gtgagggg	
F.Cat	gGGGT	CCC	GGCACC	-----	gcggcgctcgggtgtttttg...75...	gcccggagagag	gtgagggg	
B.Tau	gGGGT	CCC	GGCACC	-----	gcggcgctcgggtgtttttg...74...	gcccggagagag	gtgagggg	
S.Sus	gGGGT	CCC	GGCACC	-----	gcggcgctcgggtgtttttg...74...	gcccggagagag	gtgagggg	
L.Afr	gGGGT	CCC	GGCACC	-----	gcggcgctcgggtgtttttg...74...	gcccggagagag	gtgagggg	
	*****	***	*****		* * * * *	* * * *****	*****	

id=735362 gene=ENSG00000084693 name=AGLB5 segment=chr2.27274549.27274661.1 type=AN

H.Sap	ggggt	ccc	ggcaccg	ggcgctcgggtgtttttgggggcccgggtggagggccc	GGTGCCGGGGCCC	aaggtg	cgccctcgctagcgggagaggagcgggatcaccggcccggagagag	gtgagggg
R.Mac	ggggt	ccc	ggcaccg	ggcgctcgggtgtttttgggggcccgggtggagggccc	GGTGCCGGGGCCC	aaggtg	cgccctcgctagcgggagaggagcgggatcaccggcccggagagag	gtgagggg
P.Tro	ggggt	ccc	ggcaccg	ggcgctcgggtgtttttgggggcccgggtggagggccc	GGTGCCGGGGCCC	aaggtg	cgccctcgctagcgggagaggagcgggatcaccggcccggagagag	gtgagggg
P.Abe	ggggt	ccc	ggcaccg	ggcgctcgggtgtttttgggtgcccgggtggagggccc	GGTGCCGGGGCCC	aaggtg	cgccctcgctagcgggagaggagcgggatcaccggcccagagagag	gtgagggg
M.Mus	ggggt	ccc	ggcaccg	ggcgctcctggttttgggtgcccGGGGTGGAGGGCC	GGTGCCGGGGCCC	aaggtg	cgccctcgctagcgggagaggagcgggagcagcggcccggagagag	gtgagggg
R.Nor	ggggt	ccc	ggcaccg	ggcgctcctggttttgggtgcccGGGGTGGAGGGCC	GGTGCCGGGGCCC	aaggtg	cgccctcgctagcgggaaaggagcgggagcagcggcccggagagag	gtgagggg
C.Por	ggggt	ccc	ggcaccg	ggcgctcctggttttgggtgcccGGTGCCGGGGCCC	GGTGCCGGGGCCC	aaggtg	cgccctcgctagcgggagaggagcgggagcagcagtcagagagag	gtgagggg
O.Cun	ggggt	ccc	ggcaccg	ggcgctcctggttttgggtgcccGGTGCCGGGGCCC	GGTGCCGGGGCCC	aaggtg	cgccctcgctagcgggagaggagcgggatcagcggcccggagagag	gtgagggg
C.Fam	ggggt	ccc	ggcaccg	ggcgctcctggttttgggtgcccGGTGCCGGGGCCC	GGTGCCGGGGCCC	aaggtg	cgccctcgctagcgggagaggagcgggatcggcccggagagag	gtgagggg
F.Cat	ggggt	ccc	ggcaccg	ggcgctcctggttttgggtgcccGGTGCCGGGGCCC	GGTGCCGGGGCCC	aaggtg	cgccctcgctagcgggagaggagcgggatcggcccggagagag	gtgagggg
B.Tau	ggggt	ccc	ggcaccg	ggcgctcctggttttgggtgcccGGTGCCGGGGCCC	GGTGCCGGGGCCC	aaggtg	cgccctcgctagcgggagaggagcgggatcaccggcccggagagag	gtgagggg
S.Sus	ggggt	ccc	ggcaccg	ggcgctcctggttttgggtgcccGGTGCCGGGGCCC	GGTGCCGGGGCCC	aaggtg	cgccctcgctagcgggagaggagcgggatcaccggcccggagagag	gtgagggg
L.Afr	ggggt	ccc	ggcaccg	ggcgctcctggttttgggtgcccGGTGCCGGGGCCC	GGTGCCGGGGCCC	aaggtg	cgccctcgctagcgggagaggagcgggatcaccgg-cggagagag	gtgagggg
	*****	***	*****	* * * * *	* * * * *	* * * * *	*****	*****

id=735362 gene=ENSG00000084693 name=AGLB5 segment=chr2.27274549.27274661.1 type=AN VIEW

Figure 201:



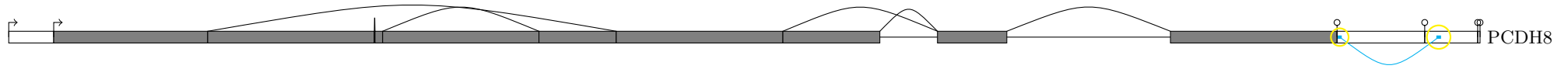
H.Sap	agcgGGGT	CCCGGCACCgc
R.Mac	agcgGGGT	CCCGGCACCgc
P.Tro	agcgGGGT	CCCGGCACCgc
P.Abe	agcgGGGT	CCCGGCACCgc
M.Mus	agtgGGGT	CCCGGCACCgc
R.Nor	agtgGGGT	CCCGGCACCgc
C.Por	agcgGGGT	CCCGGCACCgc
O.Cun	agcgGGGT	CCCGGCACCgc
C.Fam	agcgGGGT	CCCGGCACCgc
F.Cat	agcgGGGT	CCCGGCACCgc
B.Tau	agcgGGGT	CCCGGCACCgc
S.Sus	agcgGGGT	CCCGGCACCgc
L.Afr	agcgGGGT	CCCGGCACCgc
**	*****	*****

id=735361 gene=ENSG0000084693 name=AGBL5 segment=chr2.27274546.27274548.1 type=AN

H.Sap	ggggt	ccc	ggcaccg	cg	cgctc	gggtgt	ttttt	ggggg	ccc	gggtg	gaggg	ccc	GGTGCCGGGGCC	aaggtg	cg	cgctc	gtag	cg	ggg	gag	ggg	agc	gggat	cacc	gg	ccc	gg	gag	agag	gtg	agggg
R.Mac	ggggt	ccc	ggcaccg	cg	cgctc	gggtgt	ttttt	ggggg	ccc	gggtg	gaggg	ccc	GGTGCCGGGGCC	aaggtg	cg	cgctc	gtag	cg	ggg	gag	ggg	agc	gggat	cacc	gg	ccc	gg	gag	agag	gtg	agggg
P.Tro	ggggt	ccc	ggcaccg	cg	cgctc	gggtgt	ttttt	ggggg	ccc	gggtg	gaggg	ccc	GGTGCCGGGGCC	aaggtg	cg	cgctc	gtag	cg	ggg	gag	ggg	agc	gggat	cacc	gg	ccc	gg	gag	agag	gtg	agggg
P.Abe	ggggt	ccc	ggcaccg	cg	cgctc	gggtgt	ttttt	ggggg	ccc	gggtg	gaggg	ccc	GGTGCCGGGGCC	aaggtg	cg	cgctc	gtag	cg	ggg	gag	ggg	agc	gggat	cacc	gg	ccc	gg	gag	agag	gtg	agggg
M.Mus	ggggt	ccc	ggcaccg	cg	cgctc	gggtgt	ttttt	ggggg	ccc	gggtg	gaggg	ccc	GGTGCCGGGGCC	aaggtg	cg	cgctc	gtag	cg	ggg	gag	ggg	agc	gggat	cacc	gg	ccc	gg	gag	agag	gtg	agggg
R.Nor	ggggt	ccc	ggcaccg	cg	cgctc	gggtgt	ttttt	ggggg	ccc	gggtg	gaggg	ccc	GGTGCCGGGGCC	aaggtg	cg	cgctc	gtag	cg	ggg	gag	ggg	agc	gggat	cacc	gg	ccc	gg	gag	agag	gtg	agggg
C.Por	ggggt	ccc	ggcaccg	cg	cgctc	gggtgt	ttttt	ggggg	ccc	gggtg	gaggg	ccc	GGTGCCGGGGCC	aaggtg	cg	cgctc	gtag	cg	ggg	gag	ggg	agc	gggat	cacc	gg	ccc	gg	gag	agag	gtg	agggg
O.Cun	ggggt	ccc	ggcaccg	cg	cgctc	gggtgt	ttttt	ggggg	ccc	gggtg	gaggg	ccc	GGTGCCGGGGCC	aaggtg	cg	cgctc	gtag	cg	ggg	gag	ggg	agc	gggat	cacc	gg	ccc	gg	gag	agag	gtg	agggg
C.Fam	ggggt	ccc	ggcaccg	cg	cgctc	gggtgt	ttttt	ggggg	ccc	gggtg	gaggg	ccc	GGTGCCGGGGCC	aaggtg	cg	cgctc	gtag	cg	ggg	gag	ggg	agc	gggat	cacc	gg	ccc	gg	gag	agag	gtg	agggg
F.Cat	ggggt	ccc	ggcaccg	cg	cgctc	gggtgt	ttttt	ggggg	ccc	gggtg	gaggg	ccc	GGTGCCGGGGCC	aaggtg	cg	cgctc	gtag	cg	ggg	gag	ggg	agc	gggat	cacc	gg	ccc	gg	gag	agag	gtg	agggg
B.Tau	ggggt	ccc	ggcaccg	cg	cgctc	gggtgt	ttttt	ggggg	ccc	gggtg	gaggg	ccc	GGTGCCGGGGCC	aaggtg	cg	cgctc	gtag	cg	ggg	gag	ggg	agc	gggat	cacc	gg	ccc	gg	gag	agag	gtg	agggg
S.Sus	ggggt	ccc	ggcaccg	cg	cgctc	gggtgt	ttttt	ggggg	ccc	gggtg	gaggg	ccc	GGTGCCGGGGCC	aaggtg	cg	cgctc	gtag	cg	ggg	gag	ggg	agc	gggat	cacc	gg	ccc	gg	gag	agag	gtg	agggg
L.Afr	ggggt	ccc	ggcaccg	cg	cgctc	gggtgt	ttttt	ggggg	ccc	gggtg	gaggg	ccc	GGTGCCGGGGCC	aaggtg	cg	cgctc	gtag	cg	ggg	gag	ggg	agc	gggat	cacc	gg	ccc	gg	gag	agag	gtg	agggg
****	***	*****	**	*	*	*	*	*	**	**	*****	****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*	*	*	*	*	*	*	*	*****	

id=735362 gene=ENSG0000084693 name=AGBL5 segment=chr2.27274549.27274661.1 type=AN VIEW

Figure 202:



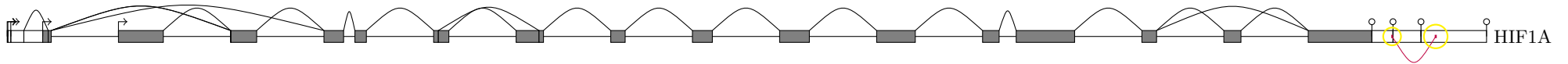
H. Sap	gTATTTCG	AAaCAAAA	-----atgtagttaatgtaattttt--...223...atttatctttca	cctgaaac
R. Mac	gTATTTCG	AAaCAAAA	-----atgtagttaatgtaattttt--...225...atttatctttca	cctgaaac
P. Tro	gTATTTCG	AAaCAAAA	-----atgtagttaatgtaattttt--...223...atttatctttca	cctgaaac
C. Jac	gTATTTCG	AAaCAAAA	-----acgtagttaatgtaattttt--...224...gtttatctttca	cctgaaac
M. Mus	gtATTTCG	AAaCAAAA	---aaatgtagttaatgtaattt----...227...ttttatctttca	ccagaaac
R. Nor	gtATTTCG	AAaCAAAA	-----aaaaatgtagttaatgtaat-----...230...ttttacctttca	ccagaaac
C. Por	gTATTTCG	AAaCAAAA	-----aaaaaagtagtttatgtaat-----...228...atttatctttca	ccagaaac
O. Cun	gTATTTCG	AAaCAAAA	-----atgtagttaatgtaattttt--...222...ggaaaattatca	cctgaaac
C. Fam	gTATTTCG	AAaCAAAAAT	-----gtagttaatgtaatttttat...222...atttatctttca	cctgaaac
F. Cat	gTATTTCG	AAaCAAAAAT	-----gtagttaatgtaatttttat...219...atttatctttca	actgaaac
E. Cab	gTATTTCG	AAaCAAAA	-----atgtagttaatgtaattttt--...226...atttatctttca	cctgaaac
S. Sus	gTATTTCG	AAaCAAAA	-----atgtagttaatgtaattttt--...252...ttttatctttta	cctgaaac
L. Afr	gTATTTCG	AAaCAAAA	cggaaaaagtagtcaatgt-----...232...aaatttctttca	tctgaaac
	*****	*****	***** **	* * * * *

id=78447 gene=ENSG00000136099 name=PCDH8 segment=chr13_53418275_53418537_-1 type=E3

H. Sap	atctttca	cctgaaacaacctagtgtttgagaaa	TTTTGccTTGCcAAGTA	---taacttgatatacttgactc--...84...ttgtcatgtgtt	tgaagaat
R. Mac	atctttca	cctgaaacaacctagtgtttgagaaa	TTTTGccTTGCcAAGTA	---taacttgatatacttgactc--...84...ttgtcatgtgtt	tgaagaat
P. Tro	atctttca	cctgaaacaacctagtgtttgagaaa	TTTTGccTTGCcAAGTA	---taacttgatatacttgactc--...84...ttgtcatgtatt	tgaagaat
C. Jac	atctttca	cctgaaacaacctagtgtttgagaga	TTTTGccTTGCcAAGTA	---taacttgatatacttgactc--...84...ttgtcatgtgtt	tgaagaat
M. Mus	atctttca	ccagaaacaacctaatgtttgagaag	TTTTGccTTGCcAAGT	ctaacaacctgtagatctg-----...87...tcgtcatgtatt	tgaagaat
R. Nor	acctttca	ccagaaacaacctgatgtttgagaag	TTTTGccTTGCcAAGT	ctaacaacctgtagatctg-----...87...ttgtcatgtatt	tgaagaat
C. Por	atctttca	ccagaaacaacctagtgtttgagaaa	TTTTGccTTGCcAAGTA	---taacttgatatacttgactc--...84...ttgtcatgtgtt	tgaagaat
O. Cun	aattatca	cctgaaacaacctagtgtttgaaaag	TTTTGccTTGCcAAGTA	---taccttgatatacttgactc--...84...ttgtcatgtgtt	tgaagcat
C. Fam	atctttca	cctgaaacaacctagtgtttgaga	ATTTTTGccTTGCcAAGTA	---taccttgatatacttgactc--...89...ttgtcatgtgtt	tgaagaat
F. Cat	acctttca	actgaaacaacctagtgtttgaga	ATTTTTGccTTGCcAAGTA	---taccttgatatacttgactc--...84...ttgtcatgtgtt	tgaagaat
E. Cab	atctttca	cctgaaacaacctagtgctgagaag	TTTTGccTTGCcAAGTA	---taac--atatacttgactc...82...ttgtcatgtgtt	tgaagaat
S. Sus	atctttca	cctgaaacaacctagtgtttgagaag	TTTTGccTTGCcAAGTA	---taacttgatatacttgactc--...84...ttgtcatgtgtt	tgaagaat
L. Afr	ttctttca	tctgaaacaacctagtgtttgagaat	TTTTGccTTGCcAAGTA	---taacttgatatacttgactc--...84...ttgtcatgtgtt	tgaagaat
	* * *	* * * * * * *	*****	* * * * *	* * * * * * *

id=78448 gene=ENSG00000136099 name=PCDH8 segment=chr13_53418116_53418274_-1 type=E3 VIEW

Figure 204:



H. Sap	ttattttt	aagaagatgcca...104...	-cagcagtagctggtagccac	AATTgCACAATATAT	ttttctt-	aaaaaata
R. Mac	ttattttt	aagaagatgcca...105...	-cagcagtagctggtagccac	AATTgCACAATATAT	ttttctt-	aaaaaata
P. Tro	ttattttt	aagaagatgcca...104...	-cagcagtagctggtagccac	AATTgCACAATATAT	ttttctt-	aaaaaata
P. Abe	ttattttt	aagaagatgcca...104...	-cagcagtagctggtagccac	AATTgCACAATATAT	ttttctt-	aaaaaata
C. Jac	ttattttt	aataagatgcca...104...	-cagcagtagctggtagccac	AATTgCACAATATAT	ttttctt-	aaaaaata
M. Mus	ttattttt	aataagatgcca...100...	tcagcagtagctggtagcca	CAATTGCACAATAT	attttctt	aaaaaac-
C. Por	ttattttt	aataagatgcca...97...	-cagcagtagctggtagccac	AATTgCACAATATAT	ttttctt-	aaaaaata
O. Cun	ttgttttt	aataagatgcca...109...	ccagcagtagctggtagcca	CAATTGCACAATAT	attttctt-	aaaaaata
C. Fam	ttattttt	aataagatgcca...98...	ccagcagtagctggtagcca	CAATTGCACAATAT	attttctt	agaaat-
B. Tau	ttattttt	aataagatgcca...97...	ccagcagtagctggtagccg	CAATTGCACAATAT	attttctt	aaaaaata
E. Cab	ttattttt	aataagatgcca...96...	ccggcagtagctggtagcca	CAATTGCACAATAT	attttctt-	aaaaaata
S. Sus	ttattttt	aataagatgcca...94...	ccagcagtagctggtagcca	CAATTGCACAATAT	attttctt	aaaaaata
O. Avi	ttattttt	aataagatgcca...97...	ccagcagtagctggtagccg	CAATTGCACAATAT	attttctt	aaaaaata
L. Afr	ttttttcc	aaggagatgcca...102...	ccagcagtagctggtagcca	CAATTGCACAATAT	ttttctt-	aaaaaata
	** ** *	** * * **	* ** ** *	*****	*****	*****

id=34540 gene=ENSG00000100644 name=HIF1A segment=chr14.62214125.62214281.1 type=E3

H. Sap	ctagaagg	tatgtggcattt...61...	tcaaagaaaacaataccct	ATGTA	TTGTGgaAGTT	tatgctaatttgtgtaact-...345...	ctgtggaccagg-	cccctttg
R. Mac	ctagaagg	tatgtggcattt...61...	tcaaagaaaacaataccct	ATGTA	TTGTGgaAGTT	tatgctaatttgtgtaact-...342...	ctgtggaccagg-	cccctttg
P. Tro	ctagaagg	tatgtggcattt...61...	tcaaagaaaacaataccct	ATGTA	TTGTGgaAGTT	tatgctaatttgtgtaact-...345...	ctgtggaccagg-	cccctttg
P. Abe	ctagaagg	tatgtggcattt...61...	tcaaagaaaacaataccct	ATGTA	TTGTGgaAGTT	tatgctaatttgtgtaact-...345...	ctgtggaccagg-	cccctttg
C. Jac	ctagaagg	tatgtggcattt...61...	tcaaagaaaacaataccct	ATGTA	TTGTGgaAGTT	tatgctaatttgtgtaact-...343...	ctgtggaccagg-	cccctttg
M. Mus	ctggaagg	tatgtggcattt...75...	-agttgtggaagcttatgcta-	AT	ATTGTGTAATTG	atgctaatttgtgtaact-...324...	ctgtggaccagg-	cccctttg
C. Por	ctggaagg	taaatggcattt...62...	taaaagaaaagtaataccct	ATGTA	TTGTGgaAGTT	tatgctaatttgtgtaact-...333...	tgtggaccaggc	cccctttg
O. Cun	ctggaagg	tatgtggcattt...87...	-agttgtggaagtttatgcta-	AT	ATTGTGTAATTG	atgctaatttgtgtaact-...318...	ctgtggaccagg-	cccctttg
C. Fam	ctggaagg	tatgtgacattt...87...	-agttgtggaagtttatgcta-	AT	ATTGTGTAATTG	atgctaatttgtgtaact-...327...	tgtggaccaggc	cccctttg
B. Tau	ctggaagg	tatgtggcattt...87...	-agttgtggaagtttatgcta-	AT	ATTGTGTAATTG	atgctaatttgtgtaact-...328...	ctgtggaccaggc	ccacttt-
E. Cab	ctggaagg	tatgtggcattt...88...	-agttgtggaagtttatgcta-	AT	ATTGTGTAATTG	atgctaatttgtgtaact-...323...	tgtggaccaggc	cccctttg
S. Sus	ctggaagg	tatgtggcattt...87...	-agttgtggaagtttatgcta-	AT	ATTGTGTAATTG	atgctaatttgtgtaact-...322...	tgtggaccaggc	cccctttg
O. Avi	ctggaagg	tatgtggcattt...82...	-agttgtggaagtttatgcta-	AT	ATTGTGTAATTG	atgctaatttgtgtaact-...328...	tgtggaccaggc	cccctttg
L. Afr	ctggaagg	tatgtggcattt...86...	tagttgtggaagtttatgcta-	AATAATTGTGTAATTG	atgctaatttgtgtaact-...326...	tgtggaccaggc	cccctttg	** * *
	** *****	** ** *****	* ** *	* ** ** *	*****	** * * * * *	*****	** * *

id=34542 gene=ENSG00000100644 name=HIF1A segment=chr14.62214490.62214976.1 type=E3 VIEW

Figure 205:



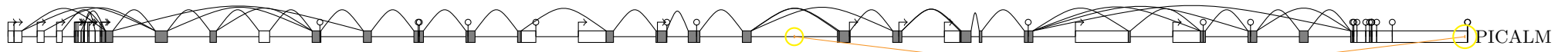
H. Sap	tttatcct	gctgtgttatat...145...-----tctaacctttttattaatcc	TTAAACACTGTCAAGGTT	tttcagtgttttttaaat...395...tgggaaaaacag	aatggcat		
R. Mac	tttatcct	gctgtgttatgt...132...-----tctaacctttttattaatcc	TTAAACACTGTCAAGGTT	tttcagtgttttttaaat...395...tgggaaaaacag	aatggcat		
P. Tro	tttatcct	gctgtgttatat...145...-----tctaacctttttattaatcc	TTAAACACTGTCAAGGTT	tttcagtgttttttaaat...395...tgggaaaaacag	aatggcat		
P. Abe	tttatcct	gctgtgttatat...146...-----tctaacctttttattaatcc	TTAAACACTGTCAAGGTT	tttcagtgttttttaaat...395...tgggaaaaacag	aatggcat		
C. Jac	cttatcct	gctatattaata...139...-----tctaacctttttattaatcc	TTAAACACTGTCAAGGTT	tttcagtgttttttaaat...396...tgggaaaaacag	aatggcat		
C. Por	tttatggt	aatgtatcagat...133...-----tctaacctttgtattaatcc	TTAAGCACTGTCAAGGTT	tttgaatttttgaacaat...374...tgggaaaaacag	aatggcat		
O. Cun	tttatggt	tctatgttctat...124...tgacatttctaacctttttg- TTAA tc	CTAAACACTGTCAAGGTT	tttcaatttttataaaaa...380...tgggaaaaacag	aatggcat		
C. Fam	tttatggc	actgtgtcatgt...136...-----ctaacctttttattaatcca	TAAACACTGTCAAGGTT	tttgaacgtttttaagtaa...396...tgggaaaaacag	aatggcat		
F. Cat	tttatggt	attgtgtcaatg...145...-----ctaacctttttattaatcca	TAAACACTGTCAAGGTT	tttgaacattttttaatt...356...tgggaaaaacag	aatggcat		
B. Tau	tctatggt	gctgtgttgtat...142...-----tctaacctttttattaatcct	TTAAACACTGTCAAGGTT	tttaacttttaaaat...393...tgggaaaaacag	aatggcat		
E. Cab	tttctgac	actgtgttgtat...142...-----ctaacctttttattaatcca	TAAACACTGTCAAGGTT	tttaaattttttaaat...405...tgggaaaaacag	aatggcat		
S. Sus	tctgtggt	actgggttgaat...143...-----ctaacctttttattaatcctg	TAAACACTGTCAAGGTT	ttcagatattttaaagt...400...tgggaaaacag	aatggcat		
L. Afr	tttatggt	gctgtgttgtgt...151...-----taacctttttattaatcctt	AAGCACTGTCAAGGTT	ttaaaattttttagaat...411...tgggaaaaacag	aatggcat		
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id=34342 gene=ENSG0000073921 name=PICALM segment=chr11.85689137.85689758_-1 type=AN

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R. Mac	tttatcct	gctgtgttatgt...397...-aagactacaatt-cccttgtc	AACCTTGATAGTG	TTTAG tatagatgttctttcattag-----	...129...tgggaaaaacag	aatggcat	
P. Tro	tttatcct	gctgtgttatat...410...-aagactacaatt-cccttgtc	AACCTTGATAGTG	TTTAG tatagatgttctttcattag-----	...129...tgggaaaaacag	aatggcat	
P. Abe	tttatcct	gctgtgttatat...411...-aagactacaatt-cccttgtc	AACCTTGATAGTG	TTTAG tatagatgttctttcattag-----	...129...tgggaaaaacag	aatggcat	
C. Jac	cttatcct	gctatattaata...405...-agactacccttcccttgtc	AACCTTGATAGTG	TTTAG tatagatgttctttcattag-----	...129...tgggaaaaacag	aatggcat	
C. Por	tttatggt	aatgtatcagat...378...-aagactcagttt-tccttgtc	AACCTTGATAGTG	TTTGG tacagatgttctttcattag-----	...128...tgggaaaaacag	aatggcat	
O. Cun	tttatggt	tctatgttctat...384...-aagactcggttt-gccttgtc	AACCTTGATAGTG	TTTAG ttagatattctttcattagatact...120...tgggaaaaacag	aatggcat		
C. Fam	tttatggc	actgtgtcatgt...401...-gagattaaat-cccttgtc	AACCTTGATAGTG	TTTAG ttataggtattcttctgtta-----	...130...tgggaaaaacag	aatggcat	
F. Cat	tttatggt	attgtgtcaatg...372...-ggagactaaat-cccttgtc	AACCTTGATAGTG	TTTAG tttaggtgttcttcatta-----	...128...tgggaaaaacag	aatggcat	
B. Tau	tctatggt	gctgtgttgtat...405...-aagactaaat-cccttgtc	AACCTTGATAGTG	TTTGG tatagatgttcttcattag-----	...129...tgggaaaaacag	aatggcat	
E. Cab	tttctgac	actgtgttgtat...416...-aagactgaat-cccttgtc	AACCTTGATAGTG	TTTAG tttagatgttcttcatta-----	...130...tgggaaaaacag	aatggcat	
S. Sus	tctgtggt	actgggttgaat...412...-aagactaaat-cccttgtc	AACCTTGATAGTG	TTTAG tttagatgttcttcatta-----	...130...tgggaaaacag	aatggcat	
L. Afr	tttatggt	gctgtgttgtgt...429...-aggactaaat-cccttgtc	AACCTTGATAGTG	TTT cagatagatgttctttcat-----	...133...tgggaaaaacag	aatggcat	
	* *	* *	*** * * * *	*****	***	***** **	*****

id=34342 gene=ENSG0000073921 name=PICALM segment=chr11.85689137.85689758_-1 type=AN VIEW

Figure 206: CS=7.8



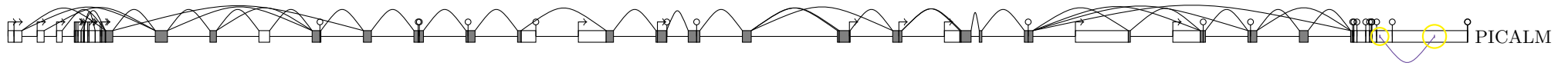
H. Sap	atggggag	gtaagcattgat...4924...-taatttatttacttcctttc	TTCA-TTTTGCTATAATACATTGG	actgcacag	atcctttc
P. Tro	gtggggag	gtaagcattgat...4924...-taatttatttacttcctttc	TTCA-TTTTGCTGAATACATTGG	actgcacag	atcctttc
P. Abe	atggggag	gtaagcattgat...4924...-taatttatttacttcctttc	TTCA-TTTTGCTGAATACATTGG	actgcacag	atcctttc
C. Jac	atggggag	gtaagcattgat...4924...-taatttatttacttcctttc	TTCA-TTTTGCTGAATACATTGG	actgcacag	atcctttc
M. Mus	atggggag	gtgagtgtcact...4550...ctaataatatt-acttcctttc	TTCA-TTTTGCTgTAATtcactgggactgcacag	actgcacag	atcctttc
R. Nor	atggggag	gtaagtcttcat...4924...ctaagtatt-acttcctttc	TTCA-TTTTGCTgTAATtcactgggactgcacag	actgcacag	atcctttc
C. Por	atggggag	gtaagtattaat...4678...-taatttatttacttcctttc	TTCA-TTTTGCTGAATACATTGG	actgcacag	atcctttc
O. Cun	gtggggag	gtaagcattaat...4924...-taatttatttacttcctttc	TTCA-TTTTGCTGAATACATTGG	actgcacag	atcctttc
C. Fam	atggggag	gtaagcattaat...4924...-taatttatttacttcctttc	TTCA-TTTTGCTGAATGCACTGG	actgcacag	atcctttc
B. Tau	atggggag	gtaagcatgaat...4715...-taattaatttacttcctttc	TTCA-TTTTGCTGAATGCACTGG	actgcacag	atcctttc
E. Cab	atggggag	gtaagcattaat...4924...-taattaatttacttcctttc	TTCA-TTTTGCTGAATGCACTGG	actgcacag	atcctttc
S. Sus	atggggag	gtaagcattaat...4924...-taattaatttacttcctttc	TTCA-TTTTGCTGAATGCACTGG	actgcacag	atcctttc
O. Avi	atggggag	gtaagcatcaat...4720...-taattaatttacttcctttc	TTCA-TTTTGCTGAATGCACTGG	actgcacag	atcctttc
L. Afr	gtggggag	gtaagcattaat...4924...-taatttatttacttcctttc	TTCA-TTTTGCTATAATGCACTGG	actgcacag	atcctttc
	*****	** * * * *	**** ** ***** ** ***** ** * ***** ** *	*****	*****

id=34325 gene=ENSG0000073921 name=PICALM segment=chr11.85701443.85707868.-1 type=IN

H. Sap	aataactg	aaattaactttt...797...ttctatttttgtttacaata	TTAAAaTGTATGTTAGC-AAAATGGG	tggattttcaataaaatgcagcttccac	aaaagttt
P. Tro	aataactg	aaattaactttt...798...ttctatttttgtttacaata	TTAAAaTGTATGTTAGC-AAAATGGG	tggattttcaataaaatgcagcttccac	aaaagttt
P. Abe	aataactg	aaattaactttt...797...ttctatttttgtttacaata	TTAAAaTGTATGTTAGC-AAAATGGG	tggattttcaataaaatgcagcttccac	aaaacttt
C. Jac	agtaactg	aaattaacttct...1097...ttctatttttgtttacaata	TTAAAaTGTATGTTAGC-AAAATGGG	tggattttcaataaaatgcagcttccac	aaaacttt
M. Mus	cataactg	aagttaactttt...799...-----tttacaatattaaatgtat	GTTAGC-AAAATGGG	tggattttcaataaaatgcagcttccac	aaaacatg
R. Nor	cataactg	aagttaactttt...799...-----tttacaatattaaatgtat	GTTAGC-AAAATGGG	tggattttcaataaaatgcagcttccac	aaaacatg
C. Por	cttaactg	aaattaactttt...791...ttctatttttgtttacaata	TTAAAaTGTATGTTAGC-AAAATGGG	tggattttcaataaaatgcagcttccac	aaaacttt
O. Cun	agtaactg	aaattaactttt...790...ttctatttttgtttacaata	TTAAAaTGTATGTTAGC-AAAATGGG	tggattttcaataaaatgcagcttccac	aaaacttt
C. Fam	aataactg	aaattaactttt...791...ttctatttttgtttacaata	TTAAAaTGTATGTTAGCAAAaATGGG	tggattttcaataaaatgcagcttccac	aaaacttt
B. Tau	agtaactg	aaattaactttt...794...ttctatttttgtttacaata	TTAAAaTGTATGTTAGCAAAaATGGG	tggattttcaataaaatgcagcttccac	aaaacttt
E. Cab	agtaactg	aaattaactttt...787...ttctatttttgtttacaata	TTAAAaTGTATGTTAGCAAAaATGGG	tggattttcaataaaatgcagcttccac	aaaacttt
S. Sus	agtaactg	aaattaactttt...790...ttctatttttgtttacaata	TTAAAaTGTATGTTAGCAAAaATGGG	tggattttcaataaaatgcagcttccac	aaaacttt
O. Avi	agaaactg	aaattaactttt...796...ttctatttttgtttacaata	TTAAAaTGTATGTTAGCAAAaATGGG	tggattttcaataaaatgcagcttccac	aaaacttt
L. Afr	agttactg	aaattaactttt...799...ttctatttttgtttacaata	TTAAAaTGTATGTTAGCAAAaATGGG	tggattttcaataaaatgcagcttccac	aaaacttt
	** *	** ***** *	*****	*****	*****

id=34364 gene=ENSG0000073921 name=PICALM segment=chr11.85668731.85669613.-1 type=E3 VIEW

Figure 207: CS=9.8



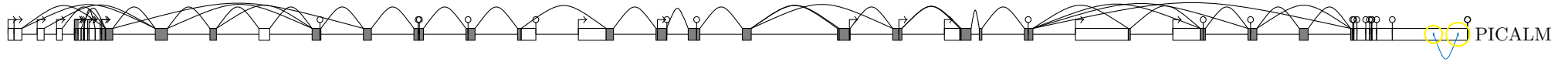
H. Sap	taatcagt	aacctatcaagaaaagccctta-----	TTTGgaAAGTgtGAAAttgtatttgaaaagctgc----	... 114 ...	aaacaataactg	aaattaac
R. Mac	taatcagt	aacctatcaagaaaagccctta-----	TTTGgaAAGTgtGAAAttgtatttgaaaagctgc----	... 114 ...	aaacagtaactg	aaattaac
P. Tro	taatcagt	aacctatcaagaaaagccctta-----	TTTGgaAAGTgtGAAAttgtatttgaaaagctgc----	... 113 ...	aaacaataactg	aaattaac
P. Abe	taatcaat	aacctatcaagaaaagccctta-----	TTTGgaAAGTgtGAAAttgtatttgaaaagctgc----	... 114 ...	aaacaataactg	aaattaac
C. Jac	taatcagt	aacctatcaagaaaagcccttg---gaaagtgagaa	ATTGTATTGGAAAAGctGCCT----	ggagagaagaactgtgtcct... 95 ...	caatagtaactg	aaattaac
C. Por	taatcagt	aacctatcaagaaaagccctta-----	TTTGgaAAGTgtGAAAttgtatttgaaaagctgc----	... 113 ...	aaacctaacta	aaattaac
O. Cun	taatcagt	aacctaccaagaaaagcccttatttgggaagtgtgaa	ATTGTATTGGAAAAGctGCCT----	ggagagaagactatgtcct... 88 ...	aaatagtaactg	aaattaac
C. Fam	taatcagt	aacctaccaagaaaagccctta-----	TTTGgaAAGTgtGAAAttgtatttgaaaagctgc----	... 115 ...	aaacaataacta	aaattaac
B. Tau	taatcagt	aacctaccaagaaaagccctta-----	TTTGgaAAGTgtGAAAttgtatttgaaaagctgc----	... 114 ...	aaacagtaacta	aaattaac
E. Cab	taatcagt	aacctaccgagaaaagccctta-----	TTTGgaAAGTatGAAAttgtatttgaaaagctgc----	... 116 ...	aaacagtaacta	aaattaac
S. Sus	taatcagt	aacctaccaagaaaagccctta-----	TTTGgaAAGTatGAAAttcatatttgaaaagctgc----	... 114 ...	aaacagtaacta	aaattaac
O. Avi	taatcagt	aacctaccaagaaaagccctta-----	TTTGgaAAGTgtGAAAttgtatttgaaaagctgc----	... 100 ...	tcacagaaacta	aaattaac
L. Afr	taatcagt	aacctaccaagagaagccctta-----	TTTGgaAAGTgtGAAAttgtatttgaaaagctgc----	... 115 ...	aaacagttactg	aaattaac
	***** *	***** * ** *****	***** **	*** * **	*	*** *****

id=34363 gene=ENSG0000073921 name=PICALM segment=chr11.85669614.85669797_-1 type=E3

H. Sap	aataactg	aaattaactttt...451...aatgaatgt---gaggaattgc---	TTTC--ACTTCAAG----	acttccttcttttcactaa...356...tgcagttccac	aaaagttt	
R. Mac	agtaactg	aaattaactttt...452...aatgaatgt---gaggaattgc---	TTTC--ACTTCAAG----	acttccttcttttcactaa...356...tgcagttccac	aaaacttt	
P. Tro	aataactg	aaattaactttt...452...aatgaatgt---gaggaattgc---	TTTC--ACTTCAAG----	acttccttcttttcactaa...356...tgcagttccac	aaaagttt	
P. Abe	aataactg	aaattaactttt...451...aatgaatgt---gaggaattgc---	TTTC--ACTTCAAG----	acttccttcttttcactaa...356...tgcagttccac	aaaacttt	
C. Jac	agtaactg	aaattaacttct...730...--ttatttccatttgacatta	GGGCCTTCCAAAATGAATgtgaggaattgcctttcactt-----	... 370 ...	tacagttccac	aaaacttt
C. Por	cttaacta	aaattaactttc...447...aatgaatgt---gaggaattgc---	TTTC--ACTTCAAG----	acttccttcttttcattaa...354...tgcagttccac	aaaacttt	
O. Cun	agtaactg	aaattaactttt...415...--attatttcca-ttgacatta	GGGCCTTCCAAAATGAATgtgaggaattgcctttcactt-----	... 378 ...	tgcagttccac	aaaacttt
C. Fam	aataacta	aaattaactttt...447...aatgaatgt---gaggaattgc---	TTTC--ACTTCAAG----	acttccttcttttcagtaa...355...tgcagttccac	aaaacttt	
B. Tau	agtaacta	aaattaactttt...451...aatgaatgt---gaggaattgc---	TTTC--ACTTCAAG----	acttccttcttttcagtaa...354...tgcagttccac	aaaacttt	
E. Cab	agtaacta	aaattaactttt...447...aatgaatgt---gaggaattgc---	TTTC--ACTTCAAG----	acttccttcttttcagtaa...351...tgcagttccac	aaaacttt	
S. Sus	agtaacta	aaattaactttt...446...aatgaatgt---gaggaattgc---	TTTC--ACTTCAAG----	acttccttcttttcagtaa...355...tgcagttccac	aaaacttt	
O. Avi	agaaactg	aaattaactttt...453...aatgaatgt---gaggaattgc---	TTTC--ACTTCAAG----	acttccttcttttcagtaa...354...tgcagttccac	aaaacttt	
L. Afr	agttactg	aaattaactttt...455...aatgaatgt---gaggaattgc---	TTTC--ACTTCAAG----	acttccttcttttcagtaa...355...cgagttccac	aaaacttt	
	***	***** *	*** **	*** * **	*** **	***** **

id=34364 gene=ENSG0000073921 name=PICALM segment=chr11.85668731.85669613_-1 type=E3 VIEW

Figure 208:



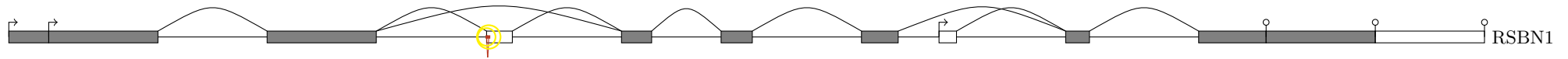
H. Sap	aataactg	aaattaactttt...431...ttgacatt---agggcctttccaAAATgaATGTGAGGAaTTGCTTTC	acttcaagactttccttctt...364...tgcagcttccac	aaaagt	
R. Mac	agtaactg	aaattaactttt...432...ttgacatt---agggcctttccaAAATgaATGTGAGGAaTTGCTTTC	acttcaagactttccttctt...364...tgcagcttccac	aaaacttt	
P. Tro	aataactg	aaattaactttt...432...ttgacatt---agggcctttccaAAATgaATGTGAGGAaTTGCTTTC	acttcaagactttccttctt...364...tgcagcttccac	aaaagt	
P. Abe	aataactg	aaattaactttt...431...ttgacatt---agggcctttccaAAATgaATGTGAGGAaTTGCTTTC	acttcaagactttccttctt...364...tgcagcttccac	aaaacttt	
C. Jac	agtaactg	aaattaacttct...741...ttgacatt---agggcctttccaAAATgaATGTGAGGAaTTGCTTTC	acttcaagactttccttctt...354...tacagcttccac	aaaacttt	
M. Mus	cataattg	aagttaactttt...432...----att---agggcctttccaatga-ATGTGAGGAaTTGCTTTC	acttcaagactgtccttctt...359...tgcagcttccac	aaaacatg	
R. Nor	cataatta	aagttaactttt...371...gtgcactgggaaggatcgtt-TCTGcTTTGTGCTGGCATgCATT-atttcccacttgacattagg...413...tgcagcttccac	aaaacatg	aaaacttt	
C. Por	cttaacta	aaattaactttc...427...ttgacatt---agggcctttccaAAATgaATGTGAGGAaTTGCTTTC	acttcaagactttccttctt...362...tgcagcttccac	aaaacttt	
O. Cun	agtaactg	aaattaactttt...426...ttgacatt---agggcctttccaAAATgaATGTGAGGAaTTGCTTTC	acttcaagactttccttctt...362...tgcagcttccac	aaaacttt	
C. Fam	aataacta	aaattaactttt...427...ttgacatt---agggcctttccaAAATgaATGTGAGGAaTTGCTTTC	acttcaagactttccttctt...363...tgcagcttccac	aaaacttt	
B. Tau	agtaacta	aaattaactttt...431...ttgacatt---agggcctttccaAAATgaATGTGAGGAaTTGCTTTC	acttcaagactttccttctt...362...tgcagcttccac	aaaacttt	
E. Cab	agtaacta	aaattaactttt...427...ttgacatt---agggcctttccaAAATgaATGTGAGGAaTTGCTTTC	acttcaagactttccttctt...359...tgcagcttccac	aaaacttt	
S. Sus	agaaacta	aaattaactttt...426...ttgacatt---agggcctttccaAAATgaATGTGAGGAaTTGCTTTC	acttcaagactttccttctt...363...tgcagcttccac	aaaacttt	
O. Avi	agaaacta	aaattaactttt...433...ttgacatt---agggcctttccaAAATgaATGTGAGGAaTTGCTTTC	acttcaagactttccttctt...362...tgcagcttccac	aaaacttt	
L. Afr	agttactg	aaattaactttt...441...----tt---agggcttttccaatgaATGTGAGGAaTTGCTTTC	acttcaagactttccttctt...363...cgcagcttccac	aaaacttt	
	*	** **	** **	*****	** **

id=34364 gene=ENSG0000073921 name=PICALM segment=chr11.85668731.85669613.-1 type=E3

H. Sap	aataactg	aaattaactttt...724...agaaggacagttcattgtag--GAAAGCAATTCTgTACATgaGTTT	aagcattcctgttgattgtctctgcagattctat	tttggtttacaatataaaatgatgtagc-aaaatgggtggattttcaaataaaatgcagcttccac	aaa
R. Mac	agtaactg	aaattaactttt...725...agaaggacagttcattgtag--GAAAGCAATTCTgTACATgaGTTT	aagcattcctgttgattgtctctgcagattctat	tttggtttacaatataaaatgatgtagc-aaaatgggtggattttcaaataaaatgcagcttccac	aaa
P. Tro	aataactg	aaattaactttt...725...agaaggacagttcattgtag--GAAAGCAATTCTgTACATgaGTTT	aagcattcctgttgattgtctctgcagattctat	tttggtttacaatataaaatgatgtagc-aaaatgggtggattttcaaataaaatgcagcttccac	aaa
P. Abe	aataactg	aaattaactttt...724...agaaggacagttcattgtag--GAAAGCAATTCTgTACATgaGTTT	aagcattcctgttgattgtctctgcagattctat	tttggtttacaatataaaatgatgtagc-aaaatgggtggattttcaaataaaatgcagcttccac	aaa
C. Jac	agtaactg	aaattaacttct...1024...agaaggacagttcattgtag--GAAAGCAATTCTgTACATgaGTTT	aagcattcctgttgattgtctctgcagattctat	tttggtttacaatataaaatgatgtagc-aaaatgggtggattttcaaataaaatgcagcttccac	aaa
M. Mus	cataattg	aagttaactttt...716...agaaggacagttcattgtag--GAAAGCAATTCTgTACATgagttaagcactactgttgattgtctctgcagattctat	tttggtttacaatataaaatgatgtagc--aaatgggtggattttcaaataaaatgcagcttccac	aaa	
R. Nor	cataatta	aagttaactttt...792...----atTTTTgTTTacaatattaaAATGTATGTAGCAaaTGGGTGGA	-----	ttttcaaataaaatgcagcttccac	aaa
C. Por	cttaacta	aaattaactttt...718...agaaggacagttcattgtag--GAAAGCAATTCTgTACATgaGTTT	aagcattcctgttgattgtctctgcagattctat	tttggtttacaatataaaatgatgtagc-aaaatgggtggattttcaaataaaatgcagcttccac	aaa
O. Cun	agtaactg	aaattaactttt...717...agaaggacagttcattgtag--GAAAGCAATTCTgTACATgaGTTT	aagcattcctgttgattgtctctgcagattctat	tttggtttacaatataaaatgatgtagc-aaaatgggtggattttcaaataaaatgcagcttccac	aaa
C. Fam	aataacta	aaattaactttt...718...agaaggacagttcattgtag--GAAAGCAATTCTgTACATgaGTTT	aagcattcctgttgattgtctctgcagattctat	tttggtttacaatataaaatgatgtagc-aaaatgggtggattttcaaataaaatgcagcttccac	aaa
B. Tau	agtaacta	aaattaactttt...721...agaaggacagtttattgtag--GAAAGCAATTCTgTACATgaGTTT	aagcattcctgttgattgtctctgcagattctat	tttggtttacaatataaaatgatgtagc-aaaatgggtggattttcaaataaaatgcagcttccac	aaa
E. Cab	agtaacta	aaattaactttt...714...agaaggacagtttattgtag--GAAAGCAATTCTgTACATgaGTTT	aagcattcctgttgattgtctctgcagattctat	tttggtttacaatataaaatgatgtagc-aaaatgggtggattttcaaataaaatgcagcttccac	aaa
S. Sus	agtaacta	aaattaactttt...717...agaaggacagttcattgtag--GAAAGCAATTCTgTACATgaGTTT	aagcattcctgttgattgtctctgcagattctat	tttggtttacaatataaaatgatgtagc-aaaatgggtggattttcaaataaaatgcagcttccac	aaa
O. Avi	agaaacta	aaattaactttt...723...agaaggacagtttattgtag--GAAAGCAATTCTgTACATgaGTTT	aagcattcctgttgattgtctctgcagattctat	tttggtttacaatataaaatgatgtagc-aaaatgggtggattttcaaataaaatgcagcttccac	aaa
L. Afr	agttactg	aaattaactttt...726...agaaggacagttcattgtag--GAAAGCAATTCTgTACATgagttgaagcactcctgttgattgtctctgcagattctat	tttggtttacaatataaaatgatgtagc-aaaatgggtggattttcaaataaaatgcagcttccac	aaa	
	*	** **	** **	*****	*****

id=34364 gene=ENSG0000073921 name=PICALM segment=chr11.85668731.85669613.-1 type=E3 VIEW

Figure 209:



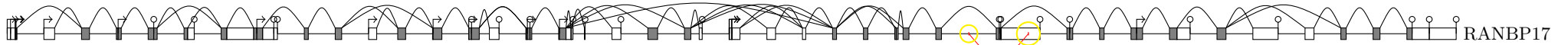
H. Sap	acactcag	gtaagataaaaa..1014..tcagaatttctctaattgaa	GTTCTCTCTGCAG	TAGAG	aga
R. Mac	acactcag	gtaagataaacg...1016..tcagaatttctctaattgaa	GTTCTCTCTGCAG	TAGAG	aga
P. Tro	acactcag	gtaagataaaaa..1019..tcagaatttctctaattgaa	GTTCTCTCTGCAG	TAGAG	aga
P. Abe	acactcag	gtaagataaaaa..1010..tcagaatttctctaattgaa	GTTCTCTCTGCAG	TAGAG	aga
C. Jac	acactcag	gtaaggtaaac...1080..tcagaatttctctaattgaa	GTTCTCTCTGCAG	TAGAG	aga
M. Mus	atactcag	gtaaggtaaaaa...967..tcagaatctctctaattgaa	GTTCTCTCTGCAG	TAGAG	aga
R. Nor	atactcag	gtaaggtaaaat...970..tcagaatttctctaattgaa	GTTCTCTCTGCAG	TAGAG	aga
C. Por	acactcag	gtaaggtaaaat...1084..tcagaatttctctaattgaa	GTTCTCTCTGCAG	TAGAG	aga
O. Cun	acactcag	gtaaggtaaaaa..1022..tcagaatttctctaattgaa	GTTCTCTCTGCAG	TAGAG	aga
C. Fam	acactcag	gtaagataaaat..1021..tcagaatttctctaattgaa	GTTCTCTCTGCAG	TAGAG	aga
E. Cab	acactcag	gtaaggtaaaat...1020..tcagaatttctctaattgaa	GTTCTCTCTGCAG	TAGAG	aga
O. Avi	acactcag	gtaaggtaaaaa..1029..tcagaatttctctaattgaa	GTTCTCTCTGCAG	TAGAG	aga
L. Afr	acactcag	gtaagataaaag...1040..tcagaatttctctaattgaa	GTTCTCTCTGCAG	TAGAG	aga
	* **	***** * **	***** * *****	*****	*****

id=617114 gene=ENSG0000081019 name=RSBN1 segment=chr1.114338926.114339984.-1 type=IN

H. Sap	cTCTGCAG	TAGAGAGAGC	aggagcagccaatgtggaga...76...taccacaaccag	gtaccgaa
R. Mac	cTCTGCAG	TAGAGAGAGC	aggagcagccaatgtggaga...76...taccacaaccag	gtaccgaa
P. Tro	cTCTGCAG	TAGAGAGAGC	aggagcagccaatgtggaga...76...taccacaaccag	gtaccgaa
P. Abe	cTCTGCAG	TAGAGAGAGC	aggagcagccaatgtggaga...78...taccacaaccag	gtaccgaa
C. Jac	cTCTGCAG	TAGAGAGAGC	aggagcagccaatgtggaga...76...taccacaatcag	gtaccaaa
M. Mus	cTCTGCAG	TAGAGAGAGC	aggagcagctaactctggaga...76...tactgcaatcag	gtaccaaa
R. Nor	cTCTGCAG	TAGAGAGAGC	aggagcagctaactctggaga...76...tactgcaatcag	gtaccaaa
C. Por	cTCTGCAG	TAGAGAGAGC	aggagcagccaatctggaga...76...tactgcaatcag	gtaccgaa
O. Cun	cTCTGCAG	TAGAGAGAGC	aggagcagccaatctggaga...76...taccacaatcag	gtaccgaa
C. Fam	cTCTGCAG	TAGAGAGAGC	aggagcagccaatctggaga...76...taccacaatcag	gtaccgaa
E. Cab	cTCTGCAG	TAGAGAGAGC	aggagcagccaatctggaga...76...taccacaatcag	gtaccgaa
O. Avi	cTCTGCAG	TAGAGAGAGC	aggagcagccaatctggaga...76...taccacaatcag	gtaccgaa
L. Afr	cTCTGCAG	TAGAGAGAGC	aggagcagccaatctggaga...76...taccacaatcag	gtaccgaa
	*****	*****	*** *****	*** **

id=617115 gene=ENSG0000081019 name=RSBN1 segment=chr1.114338808.114338925.-1 type=AN VIEW

Figure 210: CS=3.9



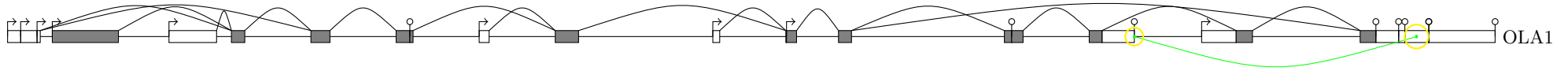
H. Sap	atgtaaag	gtgggtttgttt...4846...	gaaagaggtctgaacgagac	ATTTtaGCTAaTGAATCAA	aatcagatatgtggtcatta...60...	tccactgacag	cgatatgtt
R. Mac	acgtaaag	gtaggtttgttt...4846...	gaaagaggtctgaagagac	ATTTtaGCTAaTGAATCAA	aatcagatatgtggtcatta...60...	tccactgacag	cgatatgtt
P. Tro	atgtaaag	gtgggtttgttt...4847...	aaagaggtctgaacgagaca	TTTAGCTAATGAATCAA	aatcagatatgtggtcatt...61...	tccactgacag	cgatatgtt
P. Abe	atgtaaag	gtgggtttgttt...4846...	gaaagaggtctgaacgagac	ATTTtaGCTAaTGAATCAA	aatcagatatgtggtcatta...60...	tccactgacag	cgatatgtt
C. Jac	acgtaaag	gtgggtttgttt...4846...	gaaagaggtctgaacgagaca	ATTTtaGCTAaTGAATCAA	aatcagatatgtggtcatta...60...	tccactgacag	cgatatgtt
M. Mus	aagtaaag	gtgagttttgtt...4847...	aaagggatctaagcgagaca	TTTTAGCTAATGAATCAA	gaatcagatatgtggtcatt...61...	tccactgacag	cgatatgtt
R. Nor	aagtaaag	gtgagttttgtt...4847...	gaaaggtctaagcgagaca	TTTTAGCTAATGAATCAA	gaatcagatatgtggtcatt...61...	tccactgacag	cgatatgtt
C. Por	atgtgaag	gtgggtttgttt...4846...	aaaagggatctgagcgagac	ATTTtaGCTAaTGAATCAA	aatcagatatgtggtcatta...60...	tccactgacag	cgatatgtt
O. Cun	aagtgaag	gtgggtttgttt...4847...	aaagggatctgagcgagaca	TTTTAGCTAATGAATCAA	aatcagatatgtggtcatt...61...	tccactgacag	cgatatgtt
C. Fam	atgtaaag	gtgggtttgttc...4847...	aaagggatctgagcgagaca	TTTAGCTAATGAATCAA	aatcagatatgtggtcatt...61...	tccactgacag	cgatatgtt
F. Cat	atgtaaag	gtgggtttgttc...4847...	aaagggatctgagcgagaca	TTTAGCTAATGAATCAA	aatcagatatgtggtcatt...61...	tccactgacag	cgatatgtt
B. Tau	atgtaaag	gtgggtttgttt...4846...	gaaagagatctgagcgagac	ATTTtaGCTAaTGAATCAA	aatcagatatgtggtcatta...60...	tccactgacag	cgatatgtt
E. Cab	acgtaaag	gtgggtttgttt...4847...	aaagggatctgagcgagaca	TTTTAGCTAATGAATCAA	aatcagatatgtggtcatt...61...	tccactgacag	cgatatgtt
S. Sus	atgtaaag	gtgggtttgttt...4846...	gaaaggggtctgagcgagac	ATTTtaGCTAaTGAATCAA	aatcagatatgtggtcatta...60...	tccactgacag	cgatatgtt
L. Afr	atgtaaag	gtgggtttgttt...4847...	aaagggatctgagcgagaca	TTTAGCTAATGAATCAA	aatcagatatgtggtcatt...61...	tccactgacag	cgatatgtt
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id=5136 gene=ENSG00000204764 name=RANBP17 segment=chr5_170626778.170632527_1 type=IN

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R. Mac	gac	tggat	gtatccttatta...1999...	actggcgttgcttataataa	TTGAgt---TTCAgTAGCAAAT	cag-----cttccttgggaaaagc...	182...	gaaatactttaa	gcagtttc
P. Tro	gac	tggat	gtatccttatta...2112...	aacaaaaat-gaatatgataaaa	TGGTgtTCATTcAGTTGAGA	--caagatttatagtttcctt-----	...96...	gaaatactttaa	gcagtttc
P. Abe	gac	tggat	gtatccttatta...2029...	actggcgttgcttataataa	TTGAgt---TTCAgTAGCAAAT	cag-----cttccttgggaaaagc...	182...	gaaatactttaa	gcagtttc
C. Jac	gac	tggat	gtatccttatta...1963...	actggcgttgcttataataa	TTGAgt---TTCAgTAGCAAAT	cag-----cttccttgggaaaagc...	182...	gaaatactttaa	gcagtttc
M. Mus	gac	tggat	gtatccttatta...1950...	aacaaaaat-gaatatgataaaa	TGGTgtTCATTcAGTTGAGA	--caagatttatagtttcctt-----	...97...	aaataacttta	acagtttc
R. Nor	gac	tggat	gtatccttatta...1994...	aacaaaaat-gaatatgataaaa	TGGTgtTCATTcAGTTGAGA	--caagatttatagtttcctt-----	...97...	aaataacttta	acagtttc
C. Por	gac	tggat	gtatccttatta...2068...	actggcgttgcttataataa	TTGAgt---TTCAgTAGCAAAT	cag-----cttccttgggaaaagc...	182...	aaaatactttaa	gcagtttc
O. Cun	gac	tggat	gtatccttatta...1961...	aacgaaaat-gaatatgataaaa	TGGTgtTCATTcAGTTGAGA	--caagatttatagtttcctt-----	...96...	aaaatactttaa	gcagtttc
C. Fam	gac	tggat	gtatccttatta...1965...	aacaaaaat-gaatatgataaaa	TGGTgtTCATTcAGTTGAGA	--caagatttatagtttcctt-----	...96...	gaaatactttaa	gcagtttc
F. Cat	gac	tggat	gtatccttatta...4809...	aacaaaaat-gaatatgataaaa	TGGTgtTCATTcAGTTGAGA	--caagatttatagtttcctt-----	...96...	gaaatactttaa	gcagtttc
B. Tau	gac	tggat	gtatccttatta...1844...	accgccttgcttataataa	TTGAgt---TTCAgTAGCAAAT	cag-----cttccttgggaaaagc...	182...	gaaatactttaa	gcagtttc
E. Cab	gac	tggat	gtatccttatta...2215...	aacaaaaat-gaatatgataaaa	TGGTgtTCATTcAGTTGAGA	--caagatttatagtttcctt-----	...96...	gaaatactttaa	gcagtttc
S. Sus	gac	tggat	gtatccttatta...1900...	accgccttgcttataataa	TTGAgt---TTCAgTAGCAAAT	cag-----cttccttgggaaaagc...	182...	gaaatactttaa	gcagtttc
L. Afr	gac	tggat	gtatccttatta...1991...	aacaaaaat-gaatatgataaaa	TGGTgtTCATTcAGTTGAGA	--caagatttatagtttcctt-----	...96...	aaaatactttaa	gcagtttc
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id=5140 gene=ENSG00000204764 name=RANBP17 segment=chr5_170632617.170634907_1 type=AN VIEW

Figure 211: CS=4.5



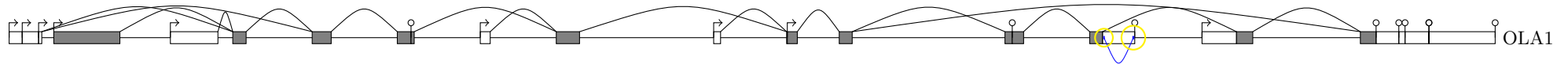
H. Sap	ccatcagg	gtaagattcata...192...cctattacatagctctgaatt	TCTTCA	tc	CTGTa	GAATc	TG	TC	taccct
R. Mac	ccatcagg	gtaagattcata...192...cctattacatagctctgaatt	TCTTCA	tc	CTGTa	GAATc	TG	TC	taccct
P. Tro	ccatcagg	gtaagattcata...192...cctattacatagctctgaatt	TCTTCA	tc	CTGTa	GAATc	TG	TC	taccct
P. Abe	ccatcagg	gtaagattcata...192...cctattacatagctctgaatt	TCTTCA	tc	CTGTa	GAATc	TG	TC	taccct
C. Jac	ccatcagg	gtaagattcata...192...cctattacatagctctgaatt	TCTTCA	tc	CTGTa	GAATc	TG	TC	taccct
C. Por	ccatcagg	gtaagattcata...192...cctattacatagctctgaatt	TCTTCA	tc	CTGTa	GAATc	TG	TC	taccct
O. Cun	ccatcagg	gtaagattcata...192...cctattacatagctctgaatt	TCTTCA	tc	CTGTa	GAATc	TG	TC	taccct
C. Fam	ccatcagg	gtaagattcata...192...cctattacatagctctgaatt	TCTTCA	tc	CTGTa	GAATc	TG	TC	taccct
F. Cat	ccatcagg	gtaagattcata...192...cctattacatagctctgaatt	TCTTCA	tc	CTGTa	GAATc	TG	TC	taccct
B. Tau	ccatcagg	gtaagattcata...192...cctattacatagctctgaatt	TCTTCA	tc	CTGTa	GAATc	TG	TC	taccct
E. Cab	ccatcagg	gtaagattcata...192...cctattacatagctctgaatt	TCTTCA	tc	CTGTa	GAATc	TG	TC	taccct
S. Sus	ccatcagg	gtaagattcata...192...cctattacatagctctgaatt	TCTTCA	tc	CTGTa	GAATc	TG	TC	taccct
L. Afr	ccatcagg	gtaagattcata...192...cctattacatagctctgaatt	TCTTCA	tc	CTGTa	GAATc	TG	TC	taccct
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id=565386 gene=ENSG00000138430 name=OLA1 segment=chr2_174945636_174945879_-1 type=AN

H. Sap	tactcaa	attgtagaagct...40...ccatcatgtatgccaagcct-	GACA	c	ATTG	ACAGTGAGGA	caatgt-ggcttgctcctttt...56...catttgac-aaaa	ccagcctt
R. Mac	tactcaa	attgtagaagct...40...ccatcatgtatgccaagcct-	GACA	c	ATTG	ACAGTGAGGA	caatgt-ggcttgctcctttt...56...catttgac-aaaa	ccagcctt
P. Tro	tactcaa	attgtagaagct...40...ccatcatgtatgccaagcct-	GACA	c	ATTG	ACAGTGAGGA	caatgt-ggcttgctcctttt...56...catttgac-aaaa	ccagcctt
P. Abe	tactcaa	attgtagaagct...40...ccatcatgtatgccaagcct-	GACA	c	ATTG	ACAGTGAGGA	caatgt-ggcttgctcctttt...56...catttgac-aaaa	ccagcctt
C. Jac	tactcaa	attgtagaagct...40...ccatcatgtatgccaagcct-	GACA	c	ATTG	ACAGTGAGGA	caatgt-ggcttgctcctttt...56...catttgac-aaaa	ccagcctt
C. Por	tactcaa	attgtagaagct...40...ccatcatgtatgccaagcct-	GACA	c	ATTG	ACAGTGAGGA	caatgt-ggcttgctcctttt...56...catttgac-aaaa	ccagcctt
O. Cun	tactcaa	attgtagaagct...40...ccatcatgtatgccaagcct-	GACA	c	ATTG	ACAGTGAGGA	caatgt-ggcttgctcctttt...56...catttgac-aaaa	ccagcctt
C. Fam	tactcaa	attgtagaagct...40...ccatcatgtatgccaagcct-	GACA	c	ATTG	ACAGTGAGGA	caatgt-ggcttgctcctttt...56...catttgac-aaaa	ccagcctt
F. Cat	tagtcaa	attgtagaggc...42...-catcatggatgccaagccct	GACA	c	ATTG	ACAGTGAGGA	caatgtgggcttgctcctttt...62...-tttgacaaaa	ccagcctt
B. Tau	tactcaa	attgtagaagct...40...ccatcatgtatgccaagcct-	GACA	c	ATTG	ACAGTGAGGA	caatgt-ggcttgctcctttt...56...catttgac-aaaa	ccagcctt
E. Cab	tactcaa	attgtggaagct...40...ccatcatgtatgccaagcct-	GACA	c	ATTG	ACAGTGAGGA	caatgt-ggcttgctcctttt...56...catttgac-aaaa	ccagcctt
S. Sus	tactcaa	attgtagaagct...40...ccatcatgtatgccaagcct-	GACA	c	ATTG	ACAGTGAGGA	caatgt-ggcttgctcctttt...56...catttgac-aaaa	ccagcctt
L. Afr	tactcaa	attgtagaagct...39...ccatcatgtatgccaagcct-	GACA	c	ATTG	ACAGTGAGGA	caatgt-ggcttgcccctttt...56...catttgac-aaaa	ccagcctt
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id=565394 gene=ENSG00000138430 name=OLA1 segment=chr2_174939738_174939917_-1 type=E3 VIEW

Figure 212:



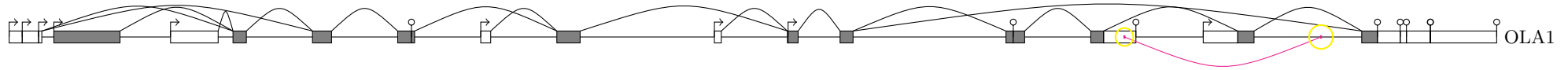
H. Sap	ccat-----	CAGG	GTAAGATTCA	tacttattcatcagctat	---at...202...ctgtagaatctg	tctaccct
R. Mac	ccat-----	CAGG	GTAAGATTCA	tacttattcatcagctat	---at...202...ctgtagaatctg	tctaccct
P. Tro	ccat-----	CAGG	GTAAGATTCA	tacttattcatcagctat	---at...202...ctgtagaatctg	tctaccct
P. Abe	ccat-----	CAGG	GTAAGATTCA	tacttattcatcagctat	---at...202...ctgtagaatctg	tctaccct
C. Jac	ccat-----	CAGG	GTAAGATTCA	tacttattcatcagctat	---at...202...ctgtagaatctg	tctaccct
M. Mus	ccat-----	CAGG	GTAAGATTCA	tacttattcatcagctat	---ac...202...ctgtagaatctg	tctgcct
R. Nor	ccatcagg	gtaagagtca	TACTtaTTCA	---tCAGCTACA	---cccgttccaca-ctattgaat..181...ctgtagaacctg	cctaccct
C. Por	ccat-----	CAGG	GTAAGATTCA	tacttattcatcagctat	---at...202...ctgtagaatctg	tctaccct
O. Cun	ccat-----	CAGG	GTAAGATTCA	tacttattcatcagctat	---at...202...ctgtagaatctg	tctaccct
C. Fam	ccat-----	CAGG	GTAAGATTCA	tacttattcatcagctat	---at...202...ctgtagaatctg	tctaccct
F. Cat	ccat-----	CAGG	GTAAGATTCA	tacttattcatcagctat	---at...202...ctgtagaatctg	tctaccct
B. Tau	ccat-----	CAGG	GTAAGATTCA	tacttattcatcagctat	---at...202...ctgtagaatctg	tctaccct
E. Cab	ccat-----	CAGG	GTAAGATTCA	tacttattcatcagctat	---at...202...ctgtagaatctg	tctaccct
S. Sus	ccat-----	CAGG	GTAAGATTCA	tacttattcatcagctat	---at...202...ctgtagaatctg	tctaccct
L. Afr	ccat-----	CAGG	GTAAGATTCA	tacttattcatcagctat	---at...202...ctgtagaatctg	tctaccct
	****	**	* * * * *	* * * * * *	*****	** **

id=565386 gene=ENSG00000138430 name=OLA1 segment=chr2_174945636_174945879_-1 type=AN

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R. Mac	ccatcagg	gtaagattcata...186...	-----attctgcctattacatagtc	TGAA	ttTCTT	cATCCTG	-----tagaatctg	tctaccct		
P. Tro	ccatcagg	gtaagattcata...186...	-----attctgcctattacatagtc	TGAA	ttTCTT	cATCCTG	-----tagaatctg	tctaccct		
P. Abe	ccatcagg	gtaagattcata...186...	-----attctgcctattacatagtc	TGAA	ttTCTT	cATCCTG	-----tagaatctg	tctaccct		
C. Jac	ccatcagg	gtaagattcata...186...	-----attctgcctattacatagtc	TGAA	ttTCTT	cATCCTG	-----tagaatctg	tctaccct		
M. Mus	ccatcagg	gtaagattcata...186...	-----attctgcctattacatagtc	TGAA	ttTCTT	cATCCTG	-----tagaatctg	tctgcct		
R. Nor	ccatcagg	gtaagattcata...108...	ccaggataactttaattatt-----	TGTGAGCTGc	TGAAc	AGTG	aaagtgagcggcattgattgaggtaggt	aaacaattgattctgcctattacatagtc	ctgaatttcttcacctgtagaacctg	cctaccct
C. Por	ccatcagg	gtaagattcata...186...	-----attctgcctattacatagtc	TGAA	ttTCTT	cATCCTG	-----tagaatctg	tctaccct		
O. Cun	ccatcagg	gtaagattcata...186...	-----attctgcctattacatagtc	TGAA	ttTCTT	cATCCTG	-----tagaatctg	tctaccct		
C. Fam	ccatcagg	gtaagattcata...186...	-----attctgcctattacatagtc	TGAA	ttTCTT	cATCCTG	-----tagaatctg	tctaccct		
F. Cat	ccatcagg	gtaagattcata...186...	-----attctgcctattacatagtc	TGAA	ttTCTT	cATCCTG	-----tagaatctg	tctaccct		
B. Tau	ccatcagg	gtaagattcata...186...	-----attctgcctattacatagtc	TGAA	ttTCTT	cATCCTG	-----tagaatctg	tctaccct		
E. Cab	ccatcagg	gtaagattcata...186...	-----attctgcctattacatagtc	TGAA	ttTCTT	cATCCTG	-----tagaatctg	tctaccct		
S. Sus	ccatcagg	gtaagattcata...186...	-----attctgcctattacatagtc	TGAA	ttTCTT	cATCCTG	-----tagaatctg	tctaccct		
L. Afr	ccatcagg	gtaagattcata...186...	-----attctgcctattacatagtc	TGAA	ttTCTT	cATCCTG	-----tagaatctg	tctaccct		
	*****	*****	*****	* * *	****	* * * * *	*****	** **		

id=565386 gene=ENSG00000138430 name=OLA1 segment=chr2_174945636_174945879_-1 type=AN VIEW

Figure 213:



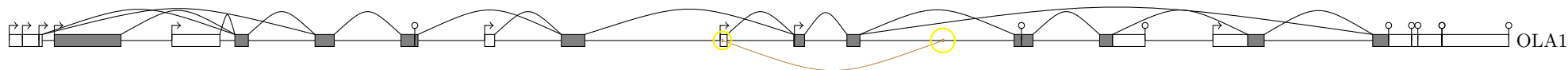
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R.Mac	ccatcagg	gtaagattcata...110...---ccaggataactttaattatt	TGTGagCTGCTGAACA	gtgaaagtggagcggcattg-----	..54...ctgtagaatctg	tctaccct
P.Tro	ccatcagg	gtaagattcata...110...---ccaggataactttaattatt	TGTGagCTGCTGAACA	gtgaaagtggagcggcattg-----	..54...ctgtagaatctg	tctaccct
P.Abe	ccatcagg	gtaagattcata...110...---ccaggataactttaattatt	TGTGagCTGCTGAACA	gtgaaagtggagcggcattg-----	..54...ctgtagaatctg	tctaccct
C.Jac	ccatcagg	gtaagattcata...110...---ccaggataactttaattatt	TGTGagCTGCTGAACA	gtgaaagtggagcggcattg-----	..54...ctgtagaatctg	tctaccct
C.Por	ccatcagg	gtaagattcata...110...tgtccaggatactt---attatt	TGTGagCTGCTGAACAGT	gaaagtggagcggcattgattgaggc...	..46...ctgtagaatctg	tctaccct
O.Cun	ccatcagg	gtaagattcata...110...---ccaggataactttaattatt	TGTGagCTGCTGAACA	gtgaaagtggagcggcattg-----	..54...ctgtagaatctg	tctaccct
C.Fam	ccatcagg	gtaagattcata...110...---ccaggataactttaattatt	TGTGagCTGCTGAACA	gtgaaagtggagcggcattg-----	..54...ctgtagaatctg	tctaccct
F.Cat	ccatcagg	gtaagattcata...110...---ccaggataactttaattatt	TGTGagCTGCTGAACA	gtgaaagtggagcggcattg-----	..54...ctgtagaatctg	tctaccct
B.Tau	ccatcagg	gtaagattcata...110...---ccaggataactttaattatt	TGTGagCTGCTGAACA	gtgaaagtggagcggcattg-----	..54...ctgtagaatctg	tctaccct
E.Cab	ccatcagg	gtaagattcata...110...---ccaggataactttaattatt	TGTGagCTGCTGAACA	gtgaaagtggagcggcattg-----	..54...ctgtagaatctg	tctaccct
S.Sus	ccatcagg	gtaagattcata...110...---ccaggataactttaattatt	TGTGagCTGCTGAACA	gtgaaagtggagcggcattg-----	..54...ctgtagaatctg	tctaccct
L.Afr	ccatcagg	gtaagattcata...110...---ccaggataactttaattatt	TGTGagCTGCTGAACA	gtgaaagtggagcggcattg-----	..54...ctgtagaatctg	tctaccct
*****	*****	*****	*	*****	*****	*****

id=565386 gene=ENSG00000138430 name=OLA1 segment=chr2_174945636_174945879_-1 type=AN

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R.Mac	cagtcaag	gtaagaattat...2963...-----	tgttacagtgacttgctgga	TGTTTGCAGaCACa	tcagaatgtaccataaaca...276...tctgtctgcag	gctgctgg
P.Tro	cagtcaag	gtaagaattgt...3072...-----	tgttacagtgacttgctgga	TGTTTGCAGaCACa	tcagaatgtaccataaaca...276...tctgtttgcag	gctgctgg
P.Abe	cagtcaag	gtaagaatttt...3472...-----	tgttacagtgacttgctgga	TGTTTGCAGaCACa	tcagaatgtaccataaaca...276...tctgtttgcag	gctgctgg
C.Jac	cagtcaag	gtaagaattat...3001...-----	tgttacagtgacttgctgca	TGTTTGCAGaCACa	tcagaatgtaccataaaca...276...tctgtttgcag	gctgctgg
C.Por	cagtcaag	gtaaggaatgat...2814...tgatctg	ttttggtagactg	ATTTCtgGCTGTTTGCAGaCACa	tcagaatgtaccataaaca...277...tcctattttcag	gcagctgg
O.Cun	cagtcaag	gtaagaattat...2940...-----	tattacagtaacttgccgga	TGTTTGCAGaCACa	tcagaatgtaccataaaca...290...tccttctgcag	gctgctgg
C.Fam	cagtcaag	gtaaggaattat...2973...-----	tgttacagtgacttgctgga	TGTTTGCAGaCACa	tcagaatgtaccataaaca...270...tccactttacag	gctgctgg
F.Cat	cagtcaag	gtaaggaattat...3444...-----	tgttacagtgacttgccgga	TGTTTGCAGaCACa	tcagaatgtaccataaaca...270...tccttctacag	gctgctgg
B.Tau	cggtcaag	gtaaggaattat...2973...-----	tgttacagtgacttgccgga	TGTTTGCAGaCACa	tcagaatgtaccataaaca...269...tctattttacag	gctgctgg
E.Cab	cggtcaag	gtaaggaattat...3208...-----	tgttacagtgacttgccgga	TGTTTGCAGaCACa	tcagaatgtaccataaaca...266...tcctattttacag	gctgctgg
S.Sus	cggtcaag	gtaaggaattgt...3061...-----	tgttacagtgacttgccgga	TGTTTGCAGaCACa	tcagaatgtaccataaaca...274...tcctactttacag	gctgctgg
L.Afr	cggtgaag	gtaaggaatcat...2931...-----	tgttacagtgacttgctgga	TGTTTGCAGaCACa	tcagaatgtaccataaaca...281...tcctgtttgcag	gctgctgg
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id=565390 gene=ENSG00000138430 name=OLA1 segment=chr2_174940256_174943695_-1 type=IN VIEW

Figure 214: CS=3.9



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P. Tro	gatgttct	gaaAGTGaATGCAGCTGGTTG	gaggtcaccagtg	cagggctcttgccattgt	gtaatgga
P. Abe	gatgttct	gaaAGTGaATGCAGCTGGTTG	gaggtcaccagtg	cagggctcttgccattgt	gtaatgga
M. Mus	gatgttct	gaaAGTGaATGCAGCTGGTTG	gaggtcaccagtg	cagggctcttgccattgt	gtaatgga
R. Nor	gatgttct	gaaAGTGaATGCAGCTGGTTG	gaggtcaccagtg	cagggctcttgccattgt	gtaatgga
C. Por	gatgttct	gaaAGTGaATGCAGCTGGTTG	gaggtcaccagtg	cagggctcttgccattgt	gtaatgga
O. Cun	gatgttct	gaaAGTGaATGCAGCTGGTTG	gaggtcaccagtg	cagggctcttgccattgt	gtaatgga
C. Fam	gatgttct	gaaAGTGaATGCAGCTGGTTG	gaggtcaccagtg	cagggctcttgccattgt	gtaatgga
F. Cat	gatgttct	gaaAGTGaATGCAGCTGGTTG	gaggtcaccagtg	cagggctcttgccattgt	gtaatgga
B. Tau	gatgttct	gaaAGTGaATGCAGCTGGTTG	gaggtcaccagtg	cagggctcttgccattgt	gtgatgca
E. Cab	gatgttct	gaaAGTGaATGCAGCTGGTTG	gaggtcaccagtg	cagggctcttgccattgt	gaaatgga
S. Sus	gatgttct	gaaAGTGaATGCAGCTGGTTG	gaggtcaccagtg	cagggctcttgccattgt	gtaataga
O. Avi	gatgttct	gaaAGTGaATGCAGCTGGTTG	gaggtcaccagtg	cagggctcttgccattgt	gtaatgga

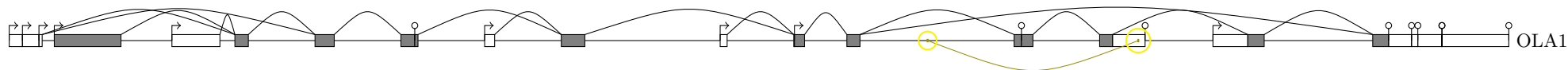
id=565375 gene=ENSG00000138430 name=OLA1 segment=chr2_174988992_174989043_-1 type=AN

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R. Mac	aacaaatg	gtaagtttttcc...4903...	ctacttgataataatgaatg	TGGT	aCAGT	caTGCATgCACT	acaagataatg	ttgtgccctttttgtctacag	gttgataa
P. Tro	aacaaatg	gtaagtttttcc...4903...	ctacttgataataatgaatg	TGGT	aCAGT	caTGCATgCACT	acaagataatg	ttgtgccctttttgtctacag	gttgataa
P. Abe	aacaaatg	gtaagtttttcc...4903...	ctacttgataataatgaatg	TGGT	aCAGT	caTGCATgCACT	acaagataatg	ttgtgccctttttgtctacag	gttgataa
M. Mus	aacaaatg	gtaagtttttcc...4903...	ctacttgataataatgaatg	TGGT	aCAGT	caTGCATgCACT	acaagataatg	ttgtgccctttttgtctacag	gttgataa
R. Nor	aacaaatg	gtaagtttttcc...4903...	ctacttgataataatgaatg	TGGT	aCAGT	caTGCATgCACT	acaagataatg	ttgtgccctttttgtctacag	gttgataa
C. Por	aacaaatg	gtaagtttttcc...4903...	ctacttgataataatgaatg	TGGT	aCAGT	caTGCATgCACT	acaagataatg	ttgtgccctttttgtctacag	gttgataa
O. Cun	aacaaatg	gtaagtttttcc...4903...	ctacttgataataatgaatg	TGGT	aCAGT	caTGCATgCACT	acaagataatg	ttgtgccctttttgtctacag	gttgataa
C. Fam	aacaaatg	gtaagtttttcc...4903...	ctacttgataataatgaatg	TGGT	aCAGT	caTGCATgCACT	acaagataatg	ttgtgccctttttgtctacag	gttgataa
F. Cat	aacaaatg	gtaagtttttcc...4903...	ctacttgataataatgaatg	TGGT	aCAGT	caTGCATgCACT	acaagataatg	ttgtgccctttttgtctacag	gttgataa
B. Tau	aacaaatg	gtaagtttttcc...4903...	ctacttgataataatgaatg	TGGT	aCAGT	caTGCATgCACT	acaagataatg	ttgtgccctttttgtctacag	gttgataa
E. Cab	aacaaatg	gtaagtttttcc...4903...	ctacttgataataatgaatg	TGGT	aCAGT	caTGCATgCACT	acaagataatg	ttgtgccctttttgtctacag	gttgataa
S. Sus	aacaaatg	gtaagtttttcc...4903...	ctacttgataataatgaatg	TGGT	aCAGT	caTGCATgCACT	acaagataatg	ttgtgccctttttgtctacag	gttgataa
O. Avi	aacaaatg	gtaagtttttcc...4903...	ctacttgataataatgaatg	TGGT	aCAGT	caTGCATgCACT	acaagataatg	ttgtgccctttttgtctacag	gttgataa

***** **
 ***** **
 ***** **

id=565381 gene=ENSG00000138430 name=OLA1 segment=chr2_174946793_174987907_-1 type=IN VIEW

Figure 215: CS=4.2



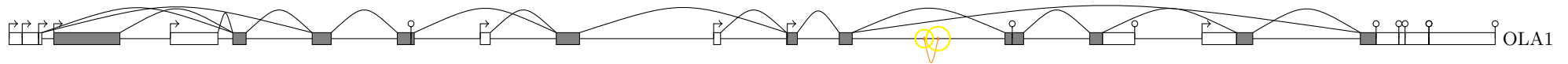
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R.Mac	aacaaatg	gtaagtttttcc...4794...	tatggcgtatacctgaagca	TTGCTGCCTGTTAATGCC	ttgaccttggaagctatac...112...	ttttgtctacag	gttgataa
P.Tro	aacaaatg	gtaagtttttcc...4794...	tatggcgtatacctgaagca	TTGCTGCCTGTTAATGCC	ttgaccttggaagctatac...112...	ttttgtctacag	gttgataa
P.Abe	aacaaatg	gtaagtttttcc...4794...	tatggcgtatacctgaagca	TTGCTGCCTGTTAATGCC	ttgaccttggaagctatac...112...	ttttgtctacag	gttgataa
C.Jac	aacaaatg	gtaagtttttcc...4794...	tatggcgtatacctgaagca	TTGCTGCCTGTTAATGCC	ttgaccttggaagctatac...112...	ttttgtctacag	gttgataa
M.Mus	aacaaatg	gtaagtgttttt...4795...	-ccagcatgtacctgaagaaa	TTGCTGCCTGcTAATgc	ccttgaccttggaagctatac...115...	ttttgtctacag	gttgataa
C.Por	aacaaatg	gtaagtttttcc...4795...	-atggcgtgtacctgaagcaa	TTGCTGCCTGTTAATGCC	ttgaccttggaagctatac...112...	ttttgtctacag	gttgataa
O.Cun	aacaaatg	gtaagtttttcc...4795...	-atggcgtgtacctgaagcaa	TTGCTGCCTGTTAATGCC	ttgaccttggaagctatac...112...	ttttgtctacag	gttgataa
C.Fam	aacaaatg	gtaagtttttcc...4795...	-acggcgtatacctgaagcaa	TTGCTGCCTGTTAATGCC	ttgaccttggaagctatac...112...	ttttgtctacag	gttgataa
F.Cat	aacaaatg	gtaagtttttcc...4795...	-atggcgtatacctgaagcaa	TTGCTGCCTGTTAATGCC	ttgaccttggaagctatac...112...	ttttgtctacag	gttgataa
B.Tau	aacaaatg	gtaagtttttcc...4794...	tatggcgtgtacctgaagca	TTGCTGCCTGTTAATGCC	ttgaccttggaagctatac...112...	ttttgtctacag	gttgataa
E.Cab	aacaaatg	gtaagtttttcc...4795...	-atggcgtatacctgaagcaa	TTGCTGCCTGTTAATGCC	ttgaccttggaagctatac...112...	ttttgtctacag	gttgataa
S.Sus	aacaaatg	gtaagtttttcc...4794...	tatggcgtatacctgaagca	TTGCTGCCTGTTAATGCC	ttgaccttggaagctatac...112...	ttttgtctacag	gttgataa
L.Afr	aacaaatg	gtaagtttttcc...4794...	-atggcgaatacctgaagcaa	TTGCTGCCTGTTAATGCC	ttgaccttggaagctatac...113...	ttttgtctacag	gttgataa
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id=565381 gene=ENSG00000138430 name=OLA1 segment=chr2_174946793_174987907_-1 type=IN

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R.Mac	ccatcagg	gtaagattcata...139...	ctgaacagtgaaagtggagc	GGCATTGATTGAGGCAG	TAAc	aattgattctgcctattacatagctg	aatttcttcatcctgtagaatctg	tctaccct
P.Tro	ccatcagg	gtaagattcata...139...	ctgaacagtgaaagtggagc	GGCATTGATTGAGGCAG	TAAc	aattgattctgcctattacatagctg	aatttcttcatcctgtagaatctg	tctaccct
P.Abe	ccatcagg	gtaagattcata...139...	ctgaacagtgaaagtggagc	GGCATTGATTGAGGCAG	TAAc	aattgattctgcctattacatagctg	aatttcttcatcctgtagaatctg	tctaccct
C.Jac	ccatcagg	gtaagattcata...139...	ctgaacagtgaaagtggagc	GGCATTGATTGAGGCAG	TAAc	aattgattctgcctattacatagctg	aatttcttcatcctgtagaatctg	tctaccct
M.Mus	ccatcagg	gtaagattcata...146...	-----gtgaaagtggagcggcattg	ATTGAGGCAG	GTAa	caattgattctgcctattacatagctg	aatttcttcatcctgtagaatctg	tctaccct
C.Por	ccatcagg	gtaagattcata...139...	ctgaacagtgaaagtggagc	GGCATTGATTGAGGCAG	GTAa	caattgattctgcctattacatagctg	aatttcttcatcctgtagaatctg	tctaccct
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C.Fam	ccatcagg	gtaagattcata...139...	ctgaacagtgaaagtggagc	GGCATTGATTGAGGCAG	GTAa	caattgattctgcctattacatagctg	aatttcttcatcctgtagaatctg	tctaccct
F.Cat	ccatcagg	gtaagattcata...139...	ctgaacagtgaaagtggagc	GGCATTGATTGAGGCAG	GTAa	caattgattctgcctattacatagctg	aatttcttcatcctgtagaatctg	tctaccct
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E.Cab	ccatcagg	gtaagattcata...139...	ctgaacagtgaaagtggagc	GGCATTGATTGAGGCAG	GTAa	caattgattctgcctattacatagctg	aatttcttcatcctgtagaatctg	tctaccct
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L.Afr	ccatcagg	gtaagattcata...139...	ctgaacagtgaaagtggagc	GGCATTGATTGAGGCAG	GTAa	caattgattctgcctattacatagctg	aatttcttcatcctgtagaatctg	tctaccct
	*****	*****		*****		*****	*****	*** **

id=565386 gene=ENSG00000138430 name=OLA1 segment=chr2_174945636_174945879_-1 type=AN VIEW

Figure 216: CS=4.2



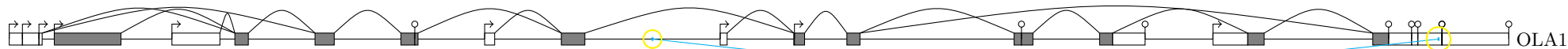
H. Sap	aacaaatg	gtaagtttttcc...4833...	ttgaccttggaaagctatac	ACAAAAAGat	GGCAT	cataaaaccgtgcaattctt...77...	ttttgtctacag	gttgataa
R. Mac	aacaaatg	gtaagtttttcc...4833...	ttgaccttggaaagctatac	ACAAAAAGat	GGCAT	cataaaaccgtgcaattctt...77...	ttttgtctacag	gttgataa
P. Tro	aacaaatg	gtaagtttttcc...4833...	ttgaccttggaaagctatac	ACAAAAAGat	GGCAT	cataaaaccgtgcaattctt...77...	ttttgtctacag	gttgataa
P. Abe	aacaaatg	gtaagtttttcc...4833...	ttgaccttggaaagctatac	ACAAAAAGat	GGCAT	cataaaaccatgcaattctt...77...	ttttgtctacag	gttgataa
C. Jac	aacaaatg	gtaagtttttcc...4833...	ttgaccttggaaagctatac	ACAAAAAGat	GGCAT	cataaaaccgtgcaattctt...77...	ttttgtctacag	gttgataa
M. Mus	aacaaatg	gtaagtttttcc...4833...	ttgaccttggaaagctatac	ACAAAAAGat	GGCAT	cataaaaccgtgcaattctt...77...	ttttgtctacag	gttgataa
C. Por	aacaagt	gtaagtttttcc...4833...	ttgaccttggaaagctatac	ACAAAAAGat	GGCAT	cataaaaccgtgcaattctt...77...	ttttgtctacag	gttgataa
O. Cun	aacaaatg	gtaagtttttcc...4833...	ttgaccttggaaagctatac	ACAAAAAGat	GGCAT	cataaaaccgtgcaattctt...77...	ttttgtctacag	gttgataa
C. Fam	aacaaatg	gtaagtttttcc...4833...	ttgaccttggaaagctatac	ACAAAAAGat	GGCAT	cataaaaccgtgcaattctt...77...	ttttgtctacag	gttgataa
F. Cat	aacaaatg	gtaagtttttcc...4833...	ttgaccttggaaagctatac	ACAAAAAGat	GGCAT	cataaaaccgtgcaattctt...77...	ttttgtctacag	gttgataa
B. Tau	aacaaatg	gtaagtttttcc...4833...	ttgaccttggaaagctatac	ACAAAAAGat	GGCAT	cataaaaccgtgcaattctt...77...	ttttgtctacag	gttgataa
E. Cab	aacaaatg	gtaagtttttcc...4833...	ttgaccttggaaagctatac	ACAAAAAGat	GGCAT	cataaaaccgtgcaattctt...77...	ttttgtctacag	gttgataa
S. Sus	aacaaatg	gtaagtttttcc...4833...	ttgaccttggaaagctatac	ACAAAAAGat	GGCAT	cataaaaccgtgcaattctt...77...	ttttgtctacag	gttgataa
O. Avi	aacaaatg	gtaagtttttcc...4833...	ttgaccttggaaagctatac	ACAAAAAGat	GGCAT	cataaaaccgtgcaattctt...77...	ttttgtctacag	gttgataa
L. Afr	aacaaatg	gtaagtttttcc...4832...	ttgaccttggaaagctatac	ACAAAAAGat	GGCAT	cataaaaccgtgcaattctt...78...	ttttgtctacag	gttgataa
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id=565381 gene=ENSG00000138430 name=OLA1 segment=chr2_174946793_174987907_-1 type=IN

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R. Mac	aacaaatg	gtaagtttttcc...4937...	atgc-actacaagataatg	GTGCCCTTT	TTGT	ctacag	gttgataa
P. Tro	aacaaatg	gtaagtttttcc...4937...	atgc-actacaagataatg	GTGCCCTTT	TTGT	ctacag	gttgataa
P. Abe	aacaaatg	gtaagtttttcc...4937...	atgc-actacaagataatg	GTGCCCTTT	TTGT	ctacag	gttgataa
C. Jac	aacaaatg	gtaagtttttcc...4937...	atgc-actacaagataatg	GTGCCCTTT	TTGT	ctacag	gttgataa
M. Mus	aacaaatg	gtaagtttttcc...4937...	atgc-actacaagataatg	GTGCCCTTT	TTGT	ctacag	gttgataa
C. Por	aacaagt	gtaagtttttcc...4937...	atgc-actacaagataatg	GTGCCCTTT	TTGT	ctacag	gttgataa
O. Cun	aacaaatg	gtaagtttttcc...4937...	atgc-actacaagataatg	GTGCCCTTT	TTGT	ctacag	gttgataa
C. Fam	aacaaatg	gtaagtttttcc...4937...	atgc-actacaagataatg	GTGCCCTTT	TTGT	ctacag	gttgataa
F. Cat	aacaaatg	gtaagtttttcc...4937...	atgc-actacaagataatg	GTGCCCTTT	TTGT	ctacag	gttgataa
B. Tau	aacaaatg	gtaagtttttcc...4937...	atgc-actacaagataatg	GTGCCCTTT	TTGT	ctacag	gttgataa
E. Cab	aacaaatg	gtaagtttttcc...4937...	atgc-actacaagataatg	GTGCCCTTT	TTGT	ctacag	gttgataa
S. Sus	aacaaatg	gtaagtttttcc...4937...	atgc-actacaagataatg	GTGCCCTTT	TTGT	ctacag	gttgataa
O. Avi	aacaaatg	gtaagtttttcc...4937...	atgc-actacaagataatg	GTGCCCTTT	TTGT	ctacag	gttgataa
L. Afr	aacaaatg	gtaagtttttcc...4937...	atgc-actacaagataatg	GTGCCCTTT	TTGT	ctacag	gttgataa
	**** *	***** **	***** **	***** **	***** **	***** **	***** **

id=565381 gene=ENSG00000138430 name=OLA1 segment=chr2_174946793_174987907_-1 type=IN VIEW

Figure 217: CS=9



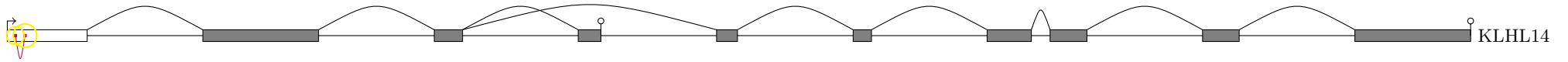
H. Sap	ctgaatat	gtaagtaaaaat...4948...tttagatttcagcagagag	AGATGtTCT	GaaAGTGa
R. Mac	ctgaatat	gtaagtaaaaat...4948...tttagatttcagcagagag	AGATGtTCT	GaaAGTGa
P. Tro	ctgaatat	gtaagtaaaaat...4948...tttagatttcagcagagag	AGATGtTCT	GaaAGTGa
P. Abe	ctgaatat	gtaagtaaaaagt...4948...tttagatttcagcagagag	AGATGtTCT	GaaAGTGa
C. Jac	ctgaatat	gtaagtaaaaat...4948...tttagatttcagcagagag	AGATGtTCT	GaaAGTGa
M. Mus	ccgagtat	gtaagtaagcat...4948...tttagatttcagcagagag	AGATGtTCT	GaaAGTGa
R. Nor	ccgaatat	gtaagtagacat...4948...tttagatttcagcagagag	AGATGtTCT	GaaAGTGa
C. Por	ctgaatat	gtaagtaaaaat...4948...tttagatttcctgcagagag	AGATGtTCT	GaaAGTGa
O. Cun	ctgaatat	gtaagtaaaaat...4948...tttagatttcagcagagag	AGATGtTCT	GaaAGTGa
C. Fam	ctgaatat	gtaagtaaaaat...4948...tttagatttcagcagagag	AGATGtTCT	GaaAGTGa
B. Tau	ctgaatat	gtaagtaaaaatt...4948...tttagatttcagcagagag	AGATGtTCT	GaaAGTGa
E. Cab	ctgaatat	gtaagtaaaaat...4948...tttagatttcagcagcagag	AGATGtTCT	GaaAGTGa
L. Afr	ctgaatat	gtaagtaaaaat...4948...tttagatttcagcagagag	AGATGtTCT	GaaAGTGa
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id=565374 gene=ENSG00000138430 name=OLA1 segment=chr2_174989044_175006552_-1 type=IN

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R. Mac	tactccaa	attgtagaagct...109...agataatgcatgttttacag	TACTcCAGATGTCT	acactcaataaaacatttgacaaaa	ccagcctt
P. Tro	tactccaa	attgtagaagct...109...agataatgcatgttttacag	TACTcCAGATGTCT	acactcaataaaacatttgacaaaa	ccagcctt
P. Abe	tactccaa	attgtagaagct...109...agataatgcatgttttacag	TACTcCAGATGTCT	acactcaataaaacatttgacaaaa	ccagcctt
C. Jac	tactccaa	attgtagaagct...109...agataatgcatgttttacag	TACTcCAGATGTCT	acactcaataaaacatttgacaaaa	ccagcctt
M. Mus	tactgcac	actgtagaagct...107...agataatgcatgttttacag	TACTcCAGATGTCT	acactcaataaaacatttgacaaaa	ccagcctt
R. Nor	tacttcaa	actgtagaagct...109...agataatgcatgttttacag	TACTcCAGATGTCT	acactcaataaaacatttgacaaaa	ccagcctt
C. Por	tacttcaa	attgtagaagct...109...agataatgcatgttttacag	TACTcCAGATGTCT	acactcaataaaacatttgacaaaa	ccagcctt
O. Cun	tactccaa	attgtagaagct...109...agataatgcatgttttacag	TACTcCAGATGTCT	acactcaataaaacatttgacaaaa	ccagcctt
C. Fam	tactccaa	attgtagaagct...109...agataatgcatgttttacag	TACTcCAGATGTCT	acactcaataaaacatttgacaaaa	ccagcctt
B. Tau	tactccaa	attgtagaagct...109...agataatgcatgttttacag	TACTcCAGATGTCT	acactcaataaaacatttgacaaaa	ccagcctt
E. Cab	tactccaa	attgtggaagct...109...agataatgcatgttttacag	TACTcCAGATGTCT	acactcaataaaacatttgacaaaa	ccagcctt
L. Afr	tactccaa	attgtagaagct...108...agataatgcatgttttacag	TACTcCAGATGTCT	acactcaataaaacatttgacaaaa	ccagcctt
	**** **	* * * * *	***** ** *	*****	*****

id=565394 gene=ENSG00000138430 name=OLA1 segment=chr2_174939738_174939917_-1 type=E3 VIEW

Figure 218:



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R.Mac tcgttacg actcactgagccccaggccccAAGGAtAATGATGTGTgttttcttgtagcataaatt...293...ggttgagagcag gtaagt
P.Tro tcgttacg actcactgagccccaggccccAAGGAtAATGATGTGTgttttcttgtagcataaatt...289...ggttgagagcag gtaagt
P.Abe tcgttacg actcactgagccccaggccccAAGGAtAATGATGTGTgttttcttgtagcataaatt...287...ggttgagagcag gtaagt
C.Jac tcgttacg actcactgagccccaggccccAAGGAtAATGATGTGTgttttcttgtagcataaatt...305...ggttgagagcag gtaagt
M.Mus tcgttacg actcactgagccccaggccccAAGGAtAATGATGTGTgttttcttgtagcataaatt...296...ggctgacagcag gtaagt
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C.Por tcgttacg actcactgagccccaggccccAAGGAtAATGATGTGTgttttcttgtagcataaatt...306...ggttgacagcag gtaagt
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C.Fam tcgttacg actcactgagccccaggccccAAGGAtAATGATGTGTgttttcttgtagcataaatt...300...ggttgaagcag gtaagt
B.Tau tcgttacg actcactgagccccaggccccAAGGAtAATGATGTGTgttttcttgtagcataaatt...306...ggttgaagcag gtaagt
E.Cab tcgttacg actcactgagccccaggccccAAGGAtAATGATGTGTgttttcttgtagcataaatt...299...ggttgaagcag gtaagt
L.Afr tcgttacg actcactgagccccaggccccAAGGAtAATGATGTGTgttttcttgtagcataaatt...292...ggttgagagcag gtaagt
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id=338329 gene=ENSG00000197705 name=KLHL14 segment=chr18_30352630_30352974_-1 type=E5

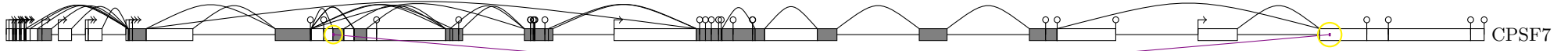
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R.Mac tcgttacg actcactgagcc...28...tcttgtagcataaattgtcACACGTaCATTtTTCTTcttcttctcttgtagcagaaagc...251...ggttgagagcag gtaagt
P.Tro tcgttacg actcactgagcc...28...tcttgtagcataaattgtcACACGTaCATTtTTCTTcttcttctcttgtagcagaaagc...247...ggttgagagcag gtaagt
P.Abe tcgttacg actcactgagcc...28...tcttgtagcataaattgtcACACGTaCATTtTTCTTcttcttctcttgtagcagaaagc...245...ggttgagagcag gtaagt
C.Jac tcgttacg actcactgagcc...28...tcttgtagcataaattgtcACACGTaCATTtTTCTTcttcttctcttgtagcagaaagc...263...ggttgagagcag gtaagt
M.Mus tcgttacg actcactgagcc...28...tcttgtagcataaattgtcACACGTaCATTtTTCTTcttcttctcttgtagcagaaagc...254...ggctgacagcag gtaagt
R.Nor tcgttacg actcactgagcc...28...tcttgtagcataaattgtcACACGTaCATTtTTCTTcttcttctcttgtagcagaaagc...254...ggctgacagcag gtaagt
C.Por tcgttacg actcactgagcc...28...tcttgtagcataaattgtcACACGTaCATTtTTCTTcttcttctcttgtagcagaaagc...264...ggttgacagcag gtaagt
O.Cun tcgttacg actcactgagcc...28...tcttgtagcataaattgtcACACGTaCATTtTTCTTcttcttctcttgtagcagaaagc...262...ggttgagagcag gtaagt
C.Fam tcgttacg actcactgagcc...28...tcttgtagcataaattgtcACACGTaCATTtTTCTTcttcttctcttgtagcagaaagc...258...ggttgaagcag gtaagt
B.Tau tcgttacg actcactgagcc...28...tcttgtagcataaattgtcACACGTaCATTtTTCTTcttcttctcttgtagcagaaagc...264...ggttgaagcag gtaagt
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id=338329 gene=ENSG00000197705 name=KLHL14 segment=chr18_30352630_30352974_-1 type=E5 VIEW

Figure 219:



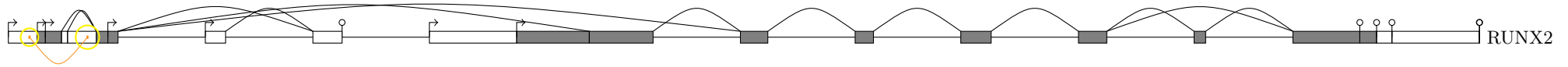
H. Sap	tcagaaac	tac--tgttgcactgttttgctctgatggggttggat	TTCTTTTCCT	ggGATCAG	GT	tgatt
P. Tro	tcagaaac	cac--tgttgcactgttttgctctgatggggttggat	TTCTTTTCCT	ggGATCAG	GT	tgatt
P. Abe	tcagaaac	cac--tgttgcactgttttgctctgatggggttggat	TTCTTTTCCT	ggGATCAG	GT	tgatt
C. Jac	tcagaaac	cac--tgttgcactgttttgctctgatggggttggat	TTCTTTTCCT	ggGATCAG	GT	tgatt
M. Mus	tcagaaac	cac--tgttgcactgttttgctctgatggggttggat	TTCTTTTCCT	ggGATCAG	GT	tgatt
R. Nor	tcagaaac	cac--tgttgcactgttttgctctgatggggttggat	TTCTTTTCCT	ggGATCAG	GT	tgatt
C. Por	tcgtagac	cgc--tgctgcactgcttttgctctgatggggttggat	TTCTTTTCCT	ggGATCAG	GT	TGGAtt
O. Cun	tcagaaac	cac--tgttgcactgttttgctctgatggggttggat	TTCTTTTCCT	ggGATCAG	GT	tgatt
C. Fam	tcaaaaac	cac--tgttgcactgttttgctctgatggggttggat	TTCTTTTCCT	ggGATCAG	GT	tgatt
F. Cat	tcaaaaac	cac--tgttgcactgttttgctctgatggggttggat	TTCTTTTCCT	ggGATCAG	GT	tgatt
B. Tau	tcagaaac	cac--tgttgcactgttttgctctgatggggttggat	TTCTTTTCCT	ggGATCAG	GT	tgatt
E. Cab	tcagaaac	cac--tgttgcactgttttgctctgatggggttggat	TTCTTTTCCT	ggGATCAG	GT	tgatt
L. Afr	tcagaaac	cacgttggtgcactgttttgctctgatggggttggat	TTCTTTTCCT	ggGATCAG	GT	tgatt
** ** *		* ** *****				*****

id=245766 gene=ENSG00000149532 name=CPSF7 segment=chr11.61188730.61188785.-1 type=AN

H. Sap	cattgcag	gagtctggttgaagcaaatgttttttaatggacttgcacatcctc	---ACCTtGATCAGGActAAAGGA	cggaggccgccccaccctcct...186...	tccatagagaat	ggtgcttt
P. Tro	cattgcag	gagtctggttgaagcaaatgttttttaatggacttgcacatcctc	---ACCTtGATCAGGActAAAGGA	cggaggccgccccaccctcct...189...	tccatagagaat	ggtgcttt
P. Abe	cattgcag	gagtctggttgaagcaaatgttttttaatggacttgcacatcctc	---ACCTtGATCAGGActAAAGGA	cggaggccgccccaccctcct...189...	tccatagagaat	ggtgcttt
C. Jac	cattgcag	gagtctggttgaagcaaatgttttttaatggacttgcacatcctc	---ACCTtGATCAGGActAAAGGA	cggaggccacccacaccctc...192...	tccatagagaat	ggtgcttt
M. Mus	cattgcag	gagtctggttgaagcaaat-tgttttaatggacttgcacatcctc	---ACCTtGATCAGGActAAAGGA	cggaggccactccaccctc...180...	tccacagagaat	ggtgcttt
R. Nor	tattgcag	gagtctggttgaagcaaat-tgttttaatggacttgcacatcctc	---ACCTtGATCAGGActAAAGGA	cggaggccgctccaccctc...180...	tccatagagaat	ggtgcttt
C. Por	tctttag	gagtctgattggaagcgga--tgtttttaatggactcgcacatcctc	TCCACCTTGATCAGGActAAAGGA	cggaggctgctccactcctc...164...	gaaccagagaat	ggtgcttt
O. Cun	cattgcag	gagtctggttgaagcaaatgttttttaatggacttgcacatcctc	---ACCTtGATCAGGActAAAGGA	cggaggccgctccaccctc...188...	tccatagagaat	ggtgcttt
C. Fam	cattgcag	gagtctggttgaagcaaatgttttttaatggacttgcacatcctc	---ACCTtGATCAGGActAAAGGA	cggaggccactccaccctc...186...	tccatagagaat	gatgcttt
F. Cat	cattgcag	gagtctggttgaagcaaatgttttttaatggacttgcacatcctc	---ACCTtGATCAGGActAAAGGA	cggaggccactccaccctc...185...	tccatagagaat	ggtgcttt
B. Tau	cattacag	gagtctggttgaagcaaatgttttttaatggacttgcacatcctc	---ACCTtGATCAGGActAAAGGA	cggaggccgctccaccctc...180...	tccatagagaat	ggtgcttt
E. Cab	cattgcag	gggtctggttgaagcaaatgttttttaatggacttgcacatcctc	---ACCTtGATCAGGActAAAGGA	cggaggccgctccaccctc...185...	tccatagagaat	ggtgcttt
L. Afr	cgttgcag	gaatctggttgaagcaaatgttttttaatggacttgcacatcctc	---ACCTtGATCAGGActGAAGGA	cggaggccgctccaccctc...185...	tccatagagaat	ggtgcttt
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id=245811 gene=ENSG00000149532 name=CPSF7 segment=chr11.61171891.61172176.-1 type=EN VIEW

Figure 220:



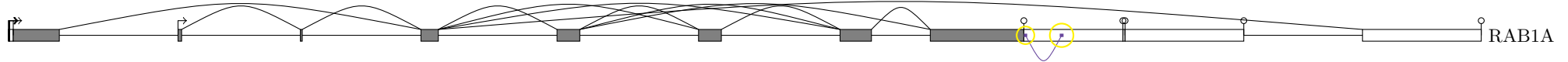
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P. Tro	ttttgtga	gagaaagagaga...75...	-ccacatgattctgcctctcc	AGTAATAGT	GCTT	gcaa--aaaaaaggagttttaaa	gctttttggattgtgtga	atgcttca
P. Abe	ttttgtga	gagaaagagaga...74...	-ccacatgattctgcctctcc	AGTAATAGT	GCTT	gc-a--aaaaaaggagttttaaa	gctttttggattgtgtga	atgcttca
C. Jac	ttttgtga	gagagagagaga...86...	-ccacatgattctgcctctcc	AGTAATAGT	GCTT	gcaaaaaaaaggagttttaaa	gctttttggattgtgtga	atgcttca
R. Nor	ttttgtca	gagagggagaaa...217...	-ccacatgattctgtctctcc	AGTAATAGT	GCTT	gcaa--aaaataggagttttaaa	gctttttggattgtgtga	atgcttca
C. Por	ttttgtca	gagggagagaga...182...	-accacatgattctctctctc	CAGTAATAGT	GCTT	gcaaa--aaaaaaggagttttaaa	gctttttggattgtgtga	atgcttca
O. Cun	ttttgtca	gagagagagaga...86...	-ccacatgattctgtctctcc	AGTAATAGT	GCTT	gcaa--aaaaaaggagttttaaa	gctttttggattgtgtga	atgcttca
C. Fam	ttgtcaga	gagaaagagaga...95...	-ccacatgattctgtctctcc	AGTAATAGT	GCTT	gcaa--aaaaaaggagttttaaa	gctttttggattgtgtga	atgcttca
F. Cat	gagagaga	gagagagagaga...81...	-ccacatgattctgtctctcc	AGTAATAGT	GCTT	gcaa--aaaaaaggagttttaaa	gctttttggattgtgtga	atgcttca
B. Tau	gggagaga	gagaaagaaaga...73...	-accacatgattctgtctctc	CAGTAATAGT	GCTT	gcaa--aaaaaaggagttttaa	gctttttggattgtgtga	atgcttca
E. Cab	ttttgtca	gagagagagaga...87...	-ccacatgattctgtctctcc	AGTAATAGT	GCTT	gcaa--aaaaaaggagttttaaa	gctttttggattgtgtga	atgcttca
S. Sus	ttttgtca	gagagagagaga...98...	-accacatgattctgtctctc	CAGTAATAGT	GCTT	gcaa--aaaaaaggagttttaaa	gctttttggattgtgtga	atgcttca
O. Avi	ttttgtca	gagggagagaga...79...	-nnnnntgattctgtctctc	CAGTAATAGT	GCTT	gc-a--aaaaaaggagttttaa	gctttttggattgtgtga	atgcttca
L. Afr	ttttgtca	gagagagagaga...81...	-ccacatgattctgtctctcc	AGTAATAGT	GCTT	gcaa--aaaaaaggagttttaaa	gctttttggattgtgtga	atgcttca
				*****	*****			*****

id=535481 gene=ENSG00000124813 name=RUNX2 segment=chr6.45295894.45296059.1 type=EN

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P. Tro	cagtaata	gtaggtccttca...68...	-gacag-aaaaaataaatata	AAGTCTAT	TACT	ccaggcatactgtaaaactaaa	caaggtttgggatggtttgtat	tttaaggc
P. Abe	cagtaata	gtaggtccttca...68...	-gacag-aaaaaataaatata	AAGTCTAT	TACT	ccaggcatactgtaaaactaaa	caaggtttgggatggtttgtat	tttaaggc
C. Jac	cagtaata	gtaggtccttca...68...	-gacag-aaaaaataaatata	AAGTCTAT	TACT	ccaggcatactgtaaaactaaa	caaggtttgggatggtttgtat	tttaaggc
R. Nor	cagtaata	gtaggtccttca...67...	-gacag-aaaaaataaatata	AAGTCTAT	TACT	ccaggcatactgtacaactaaa	caaggtttgggatggtttgtat	tttaaggc
C. Por	cagtaata	gtaggtccttca...66...	-gacag-aaaaaataaatata	AAGTCTAT	TACTG	caggcatactgtaaagctaaa	caaggtttgggatggtttgtat	tttaaggc
O. Cun	cagtaata	gtaggtccttca...68...	-gacag-aaaaaataaatata	AAGTCTAT	TACT	ccagacatactgtaaaactaaa	caaggtttgggatggtttgtat	tttaaggc
C. Fam	cagtaata	gtaggtccttca...68...	-gacag-aaaaaataaatata	AAGTCTAT	TACT	ccaggcatactgtaaaactaaa	caaggtttgggatggtttgtat	tttaaggc
F. Cat	cagtaata	gtaggtccttca...66...	-gacag-aaaaaataaatata	AAGTCTAT	TACT	ccaggcatactgtaaaactaaa	caaggtttgggatggtttgtat	tttaaggc
B. Tau	cagtaata	gtaggtccttcc...69...	-gacagaaaaaataaatata	CAAGTCTAT	TACTG	caggcatactgtaaaactaaa	caaggtttgggatggtttgtat	tttaaggc
E. Cab	cagtaata	gcaggccttca...68...	-gacag-aaaaaataaatata	AAGTCTAT	TACT	ccaggcatactgtaaaactaaa	caaggtttgggatggtttgtat	tttaaggc
S. Sus	cagtaata	gtaggtccttca...67...	-tgacag-aaaaaataaatata	CAAGTCTAT	TACTG	caggcatactgtaaaactaaa	caaggtttgggatggtttgtat	tttaaggc
O. Avi	cagtaata	gtaggtccttcc...69...	-gacagaaaaaataaatata	CAAGTCTAT	TACTG	caggcatactgtaaaactaaa	caaggtttgggatggtttgtat	tttaaggc
L. Afr	cagtaata	gtaggtccttca...68...	-gacag-aaaaaataaatata	AAGTCTAT	TACT	ccaggcatactgtaaaactaaa	caaggtttgggatggtttgtat	tttaaggc
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id=535485 gene=ENSG00000124813 name=RUNX2 segment=chr6.45296233.45296397.1 type=AN VIEW

Figure 221:



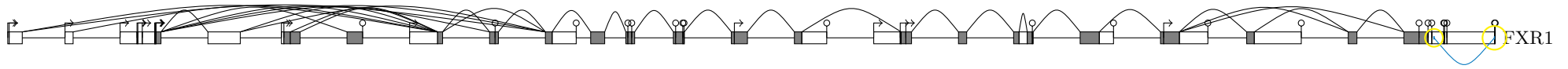
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R. Mac	tCATTTC	AGAACTG	ttttaaacctttgtgtgctg-----	..378...	-cttattggaagt	aatatcaa
P. Tro	tCATTTC	AGAACTG	ttttaaacctttgtgtgctg-----	..378...	-cttattggaagt	aatatcaa
P. Abe	tCATTTC	AGAACTG	ttttaaacctttgtgtgctg-----	..378...	-cttattggaagt	aatatcaa
C. Jac	tCATTTC	AGAACTG	ttttaaacctttgtgtgctg-----	..378...	-cttattggaagt	aatatcaa
M. Mus	tCATTTC	AGAACTG	tTTAAacctttgtgtgctggtttat..	..369...	-cttattggaagt	aatatcaa
R. Nor	tCATTTC	AGAACTG	tTTAAacctttgtgtgctggtttat..	..369...	-cttattggaagt	aatatcaa
C. Por	tCATTTC	AGAACTG	ttttaaacctttgtgtgctg-----	..377...	-cttactggaagt	aatatcaa
O. Cun	tCATTTC	AGAACTG	ttttaaacctttgtgtgctg-----	..376...	-acttattgg-agt	aatatcaa
C. Fam	tCATTTC	AGAACTG	ttttaaacctttgtgtgctg-----	..378...	-cttattggaagt	aatatcaa
F. Cat	tCATTTC	AGAACTG	ttttaaacctttgtgtgctg-----	..378...	-cttattggaagt	aatatcaa
B. Tau	tCATTTC	AGAACTG	ttttaaacctttgtgtgctg-----	..377...	-cttattggaagt	aatatcaa
E. Cab	tCATTTC	AGAACTG	ttttaaacctttgtgtgctg-----	..378...	-cttattggaagt	aatatcaa
S. Sus	tCATTTC	AGAACTG	ttttaaacctttgtgtgctg-----	..378...	-cttattggaagt	aatatcaa
O. Avi	tCATTTC	AGAACTG	ttttaaacctttgtgtgctg-----	..378...	-cttattggaagt	aatatcaa
L. Afr	tCATTTC	AGAACTG	ttttaaacctttgtgtgctg-----	..377...	-cttattggaagt	aatatcaa
	*****	*****	*****		**** ** *	*****

id=541848 gene=ENSG00000138069 name=RAB1A segment=chr2_65315014_65315430_-1 type=AN

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R. Mac	tcattttc	agaactgtttta..	..111..	-----gcatgtttagatgtcaggtt	TAGTct	TCTGAAGATGA	agttcagccattttgtatca..	..225...	-cttattggaagt	aatatcaa	
P. Tro	tcattttc	agaactgtttta..	..111..	-----gcatgtttagatgtcaggtt	TAGTct	TCTGAAGATGA	agttcagccattttgtatca..	..225...	-cttattggaagt	aatatcaa	
P. Abe	tcattttc	agaactgtttta..	..111..	-----gcatgtttagatgtcaggtt	TAGTct	TCTGAAGATGA	agttcagccattttgtatca..	..225...	-cttattggaagt	aatatcaa	
C. Jac	tcattttc	agaactgtttta..	..111..	-----gcatgtttagatgtcaggtt	TAGTct	TCTGAAGATGA	agttcagccattttgtatca..	..225...	-cttattggaagt	aatatcaa	
M. Mus	tcattttc	agaactgtttta..	..104..	..tatattggcatgtttagatg	TTGGGtt	TAGTct	TCTGAAGATGA	agttcagccattttgtatca..	..222...	-cttattggaagt	aatatcaa
R. Nor	tcattttc	agaactgtttta..	..104..	..tatattggcatgtttagatg	TTGGGtt	TAGTct	TCTGAAGATGA	agttcagccattttgtatca..	..222...	-cttattggaagt	aatatcaa
C. Por	tcattttc	agaactgtttta..	..110..	-----gcatgtttagatgtcaggtt	TAGTct	TCTGAAGATGA	agttcagccattttgtatca..	..225...	-cttactggaagt	aatatcaa	
O. Cun	tcattttc	agaactgtttta..	..111..	-----gcatgtttagatgtcaggtt	TAGTct	TCTGAAGATGA	agttcagccattttgtatca..	..223...	-acttattgg-agt	aatatcaa	
C. Fam	tcattttc	agaactgtttta..	..111..	-----gcatgtttagatgtcaggtt	TAGTct	TCTGAAGATGA	agttcagccattttgtatca..	..225...	-cttattggaagt	aatatcaa	
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B. Tau	tcattttc	agaactgtttta..	..110..	-----gcatgtttagatgtcaggtt	TAGTct	TCTGAAGATGA	agttcagccattttgtatca..	..225...	-cttattggaagt	aatatcaa	
E. Cab	tcattttc	agaactgtttta..	..111..	-----gcatgtttagatgtcaggtt	TAGTct	TCTGAAGATGA	agttcagccattttgtatca..	..225...	-cttattggaagt	aatatcaa	
S. Sus	tcattttc	agaactgtttta..	..111..	-----gcatgtttagatgtcaggtt	TAGTct	TCTGAAGATGA	agttcagccattttgtatca..	..225...	-cttattggaagt	aatatcaa	
O. Avi	tcattttc	agaactgtttta..	..111..	-----gcatgtttagatgtcaggtt	TAGTct	TCTGAAGATGA	agttcagccattttgtatca..	..225...	-cttattggaagt	aatatcaa	
L. Afr	tcattttc	agaactgtttta..	..111..	-----gcatgtttagatgtcaggtt	TAGTct	TCTGAAGATGA	agttcagccattttgtatca..	..224...	-cttattggaagt	aatatcaa	
	*****	*****	*****	*****	**	*****	*****	*****	**** ** *	*****	

id=541848 gene=ENSG00000138069 name=RAB1A segment=chr2_65315014_65315430_-1 type=AN VIEW

Figure 222:



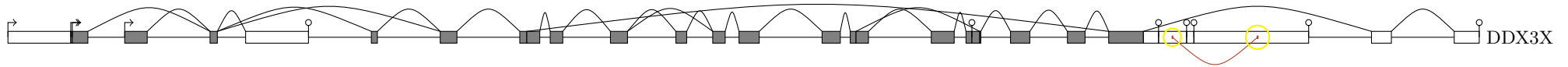
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R.Mac	tttgaat	tcaaaaagGGGAggGATCctGAAG	aaatcatatgttaacatac...71...aagttgctggct	ataggaaa
P.Tro	tttgaat	tcaaaaagGGGAggGATCctGAAG	aaatcatatgttaacatac...71...aagttgctggct	ataggaaa
P.Abe	tttgaat	tcaaaaagGGGAggGATCctGAAG	aaatcatatgttaacatac...71...aagttgctggct	ataggaaa
M.Mus	tttgaat	tcagaaagGGGAggGATCctGAAG	aaatcatatgttaacatac...69...aagttgctggct	ataggaaa
C.Por	tttgaat	tcagaaagGGGAggGATCctGAAG	aaatcataatgttaacatac...69...aagttgctggct	ataggaaa
O.Cun	tttgaat	tcagaaagGGGAggGATCctGAAG	aaatcatatgttaacatac...73...aagttgctggct	ataggaaa
C.Fam	tttgaat	tcagaaagGGGAggGATCctGAAG	aaatcatatgttaacatac...70...aagttgctggct	ataggaaa
B.Tau	tttgaat	tcagaaagGGGAggGATCctGAAG	aaatcatatgttaacatac...65...aagttgctggct	ataggaaa
E.Cab	tttgaat	tcagaaagGGGAggGATCctGAAG	aaatcatatgttaacatac...70...aagttgctggct	ataggaaa
S.Sus	tttgaat	tcagaaagGGGAggGATCctGAAG	aaatcatatgttaacatac...69...aagttgctggct	ataggaaa
O.Avi	tttgaat	tcagaaagGGGAggGATCctGAAG	aaatcatatgttaacatac...64...aagttgctggct	ataggaaa
L.Afr	tttgaat	tcagaaagGGGAggGATCctGAAG	aaatcatatgttaacatac...71...aagttgctggct	ataggaaa
*****	***	*****	*****	*****

id=231634 gene=ENSG00000114416 name=FXR1 segment=chr3_180694207_180694333.1 type=EN

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R.Mac	atatggca	gagatggggggt...525...gtatgcaggtagt-aaataaa-CTTTGATCTTC	att	tgctgaat
P.Tro	atatggca	gagatggggggt...527...gtatgcaggtagt-aaataaa-CTTTGATCTTC	att	tgctgaat
P.Abe	atatggca	gagatggggggt...533...gtatgcaggtagt-aaataaa-CTTTGATCTTC	att	tgctgaat
M.Mus	atatggca	gagatgggggga...556...-tatgcaggtagt-aaataaa-CTTTGATCTTC	att	tgctgatt
C.Por	atatggca	gagatgggggag...538...gtatgcaggtagt-aaataaa-CTTTGATCTTC	att	tgctgatt
O.Cun	atatggca	gagattggggga...541...gtatacaggtagt-aaataaa-CTTTGATCTTC	att	tgctgatt
C.Fam	atatggca	gagatgggggga...562...gtatgcaggtagt-aaataaa-CTTTGATCTTC	att	tgctgatt
B.Tau	atatggca	gagattgggggg...571...gtatgcaggtagt-aaataaa-CTTTGATCTTC	att	tgctgatt
E.Cab	atatggca	gagatgggggga...561...gtatgcaggtagt-aaataaa-CTTTGATCTTC	att	tgctgatt
S.Sus	atatggca	gagatgggggag...567...gtatgcaggtagt-aaataaa-CTTTGATCTTC	att	tgccgatt
O.Avi	atatggca	gagatggggggg...569...gtatgcaggtagt-aaataaa-CTTTGATCTTC	att	tgctgatt
L.Afr	aaatggca	gagatgggggga...524...gtatgcaggtagt-aaataaa-CTTTGATCTTC	att	tgctgatt
* *****	*****	*****	*****	*****

id=231637 gene=ENSG00000114416 name=FXR1 segment=chr3_180694368_180694943.1 type=E3 VIEW

Figure 223:



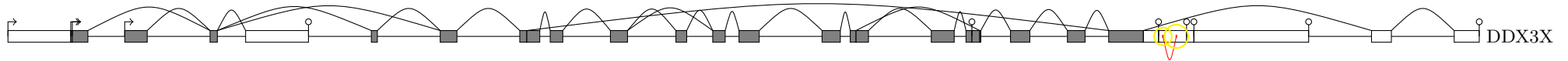
H. Sap	tgccctta	actttagacaac...64...tttactgaacttgggctaaa	ATCAAACCTTGGCA	cacaggtgtgatacaactta...81...gattgggggaaa	acaacaaa----
P. Tro	tgccctta	actttagacaac...64...tttactgaacttgggctaaa	ATCAAACCTTGGCA	cacaggtgtgatacaactta...81...gattgggggaaa	acaacaaa----
P. Abe	tgccctta	actttagacaac...64...tttactgaacttgggctaaa	ATCAAACCTTGGCA	cacaggtgtgatacaactta...81...gattgggggaaa	acaacaaa----
C. Jac	tgccctta	actttagacaac...64...tttactgaacttgggctaaa	ATCAAACCTTGGCA	cacaggtgtgatacaactta...81...gattgggggaaa	acaacaaa----
M. Mus	tgccctta	actttagacaac...65...tttactgaacttgggctaaa	ATCAAACCTTGGCA	cacaggtgtgatacaactta...80...gattgggggaaa	acaacaaa----
R. Nor	tgccctta	actttagacaac...65...tttactgaacttgggctaaa	ATCAAACCTTGGCA	cacaggtgtgatacaactta...83...----tggggaaa	tcaacaacaaa
C. Por	tgccctta	actttagacaac...63...attactgaacttgggctaaa	ATCAAACCTTGGCA	cacaggtgtgatacaactta...83...----gggggaaa	acaacaacaaa
O. Cun	tgccctta	actttagacaac...64...tttactgaacttgggctaaa	ATCAAACCTTGGCA	cacaggtgtgatacaactta...82...gattgggggaaa	acagacaaa----
C. Fam	tgccctta	actttagacaac...64...tttactgaacttgggctaaa	ATCAAACCTTGGCA	cacaggtgtgatacaactta...83...gattgggggaaa	acaacaaa----
F. Cat	tgccctta	actttagacaac...64...tttactgaacttgggctaaa	ATCAAACCTTGGCA	cacaggtgtgatacaactta...82...gattgggggaaa	ataaacaaa----
B. Tau	tgccctta	actttagacaac...65...tttactgaacttgggctaaa	ATCAAACCTTGGCA	cacaggtgtgatacaactta...82...gattgggggaaa	acaacaaa----
E. Cab	tgccctta	actttagacaac...64...tttactgaacttgggctaaa	ATCAAACCTTGGCA	cacaggtgtgatacaactta...82...gatcgggggaaa	acaacaaa----
S. Sus	tgccctta	actttagacaac...64...tttactgaacttgggctaaa	ATCAAACCTTGGCA	cacaggtgtgatacaactta...82...gattgggggaaa	acaacaaa----
*****	*****	*****	*****	*** **	* **

id=566271 gene=ENSG00000215301 name=DDX3X segment=chrX_41207290.41207512.1 type=AN

H. Sap	actgtatt	aagttaaagttc...1439...ggcgacttgaatataatca	TGCCAAGGTTT	TGAT	acacttgccttaagatatta...374...aactgcacagtc	tcctttgt
P. Tro	actgtatt	aagttaaagttc...1435...ggcgacttgaatataatca	TGCCAAGGTTT	TGAT	acacttgccttaagatatta...374...aactgcacagtc	tcctttgt
P. Abe	actgtatt	aagttaaagttc...1434...ggcgacttgaatataatca	TGCCAAGGTTT	TGAT	acacttgccttaagatatta...384...aactgcacagtc	tcctttgt
C. Jac	actgtatt	aagttaaagttc...1440...ggcgacttgaatataatca	TGCCAAGGTTT	TGAT	acacttgccttaagatatta...379...aactgcacagtc	tcctttgt
M. Mus	actgtatt	aagttaaagttc...1455...ggcgacttgaatataatca	TGCCAAGGTTT	TGAT	acacttgccttaagatatta...361...aactgcacagtc	tcctttgt
R. Nor	actgtatt	aagttaaagttc...1452...ggcgacttgaatataatca	TGCCAAGGTTT	TGAT	acacttgccttaagatatta...361...aactgcacagtc	tcctttgt
C. Por	actgtatt	aagttaaagttc...1442...ggcgacttgaatataatca	TGCCAAGGTTT	TGAT	acacttgccttaagatatta...365...aactgcacagtc	tcctttgt
O. Cun	actgtatt	aagttaaagttc...1441...ggcgacttgaatataatca	TGCCAAGGTTT	TGAT	acacttgccttaagatatta...380...aactgcacagtc	tcctttgt
C. Fam	actgtatt	aagttaaagttc...1441...ggcgacttgaatataatca	TGCCAAGGTTT	TGAT	acacttgccttaagatatta...379...aactgcacagtc	tcctttgt
F. Cat	actgtatt	aagttaaagttc...1441...ggcgacttgaatataatca	TGCCAAGGTTT	TGAT	acacttgccttaagatatta...377...aactgcacagtc	tcctttgt
B. Tau	actgtatt	aagttaaagttc...1443...ggcgacttgaatataatca	TGCCAAGGTTT	TGAT	acacttgccttaagatatta...373...aactgcacagtc	tcctttgt
E. Cab	actgtatt	aagttaaagttc...1438...ggcgacttgaatataatca	TGCCAAGGTTT	TGAT	acacttgccttaagatatta...379...aactgcacagtc	tcctttgt
S. Sus	actgtatt	aagttaaagttc...1443...ggcgacttgaatataatca	TGCCAAGGTTT	TGAT	acacttgccttaagatatta...377...aactgcacagtc	ttttgttg
*****	*****	*****	*****	*****	*****	*****

id=566273 gene=ENSG00000215301 name=DDX3X segment=chrX_41207571.41209462.1 type=AN VIEW

Figure 224:



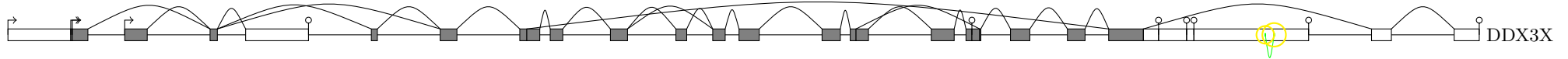
H. Sap	tgccttta	acttttagacaactttttatt	TGATgTCCTGTTGG	ctcagtaatgctcaagatat...156..gattgggggaaa	acaacaaa----
R. Mac	tgccttta	acttttagacaactttttatt	TGATgTCCTGTTGG	ctcagtaatgctcaagatat...156..gattgggggaaa	acaacaaa----
P. Tro	tgccttta	acttttagacaactttttatt	TGATgTCCTGTTGG	ctcagtaatgctcaagatat...156..gattgggggaaa	acaacaaa----
P. Abe	tgccttta	acttttagacaactttttatt	TGATgTCCTGTTGG	ctcagtaatgctcaagatac...156..gattgggggaaa	acaacaaa----
C. Jac	tgccttta	acttttagacaactttttatt	TGATgTCCTGTTGG	ctcagtaatgctcaagatat...156..gattgggggaaa	acaacaaa----
M. Mus	tgccttta	acttttagacaactttttatt	TGATgTCCTGTTGG	ctcagtaatgctcaagattc...156..gattgggggaaa	acaacaaa----
R. Nor	tgccttta	acttttagacaactttttatt	TGATgTCCTGTTGG	ctcagtaatgctcaagattc...159..----tggggaaa	tcaaacacaacaaa
C. Por	tgccttta	acttttagacaactttttatt	TGATgTCCTGTTGG	ctcagtaatgctcaagatat...157..----gggggaaa	acaacacaacaaa
O. Cun	tgccttta	acttttagacaactttttatt	TGATgTCCTGTTGG	ctcagtaatgctcaagatat...157..gattggggggaa	acagacaaa----
C. Fam	tgccttta	acttttagacaactttttatt	TGATgTCCTGTTGG	ctcagtaatgctcaagatat...158..gattgggggaaa	acaacaaa----
F. Cat	tgccttta	acttttagacaactttttatt	TGATgTCCTGTTGG	ctcagtaatgctcaagatat...157..gattgggggaaa	ataaacaaa----
B. Tau	tgccttta	acttttagacaactttttatt	TGATgTCCTGTTGG	ctcagtaatgctcaagatac...158..gattgggggaaa	acaacaaa----
E. Cab	tgccttta	acttttagacaactttttatt	TGATgTCCTGTTGG	ctcagtaatgctcaagatat...157..gatcgggggaaa	acaacaaa----
S. Sus	tgccttta	acttttagacaactttttatt	TGATgTCCTGTTGG	ctcagtaatgctcaagatat...157..gattgggggaaa	acaacaaa----
*****	*****	*****	*****	*****	*** ** * **

id=566271 gene=ENSG00000215301 name=DDX3X segment=chrX_41207290_41207512.1 type=AN

H. Sap	tgccttta	acttttagacaac...95..gcacacaggtgtgatacaac	TTAACAGGAATCA	tcgattcatccataaataat...51..gattgggggaaa	acaacaaa----
R. Mac	tgccttta	acttttagacaac...95..gcacacaggtgtgatacaac	TTAACAGGAATCA	tcgattcatccataaataat...51..gattgggggaaa	acaacaaa----
P. Tro	tgccttta	acttttagacaac...95..gcacacaggtgtgatacaac	TTAACAGGAATCA	tcgattcatccataaataat...51..gattgggggaaa	acaacaaa----
P. Abe	tgccttta	acttttagacaac...95..gcacacaggtgtgatacaac	TTAACAGGAATCA	tcgattcatccataaataat...51..gattgggggaaa	acaacaaa----
C. Jac	tgccttta	acttttagacaac...95..gcacacaggtgtgatacaac	TTAACAGGAATCA	tcgattcatccataaataat...51..gattgggggaaa	acaacaaa----
M. Mus	tgccttta	acttttagacaac...96..gcacacaggtgtgatacaac	TTAACAGGAATCA	tcgattcatccataaataat...50..gattgggggaaa	acaacaaa----
R. Nor	tgccttta	acttttagacaac...96..gcacacaggtgtgatacaac	TTAACAGGAATCA	tcgattcatccataaataat...53..----tggggaaa	tcaaacacaacaaa
C. Por	tgccttta	acttttagacaac...94..gcacacaggtgtgatacaac	TTAACAGGAATCA	tcgattatccataaataat...53..----gggggaaa	acaacacaacaaa
O. Cun	tgccttta	acttttagacaac...95..gcacacaggtgtgatacaac	TTAACAGGAATCA	tcgattcatccataaataat...52..gattggggggaa	acagacaaa----
C. Fam	tgccttta	acttttagacaac...95..gcacacaggtgtgatacaac	TTAACAGGAATCA	tcgattcatccataaataat...53..gattgggggaaa	acaacaaa----
F. Cat	tgccttta	acttttagacaac...95..gcacacaggtgtgatacaac	TTAACAGGAATCA	tcgattcatccataaataat...52..gattgggggaaa	ataaacaaa----
B. Tau	tgccttta	acttttagacaac...96..gcacacaggtgtgatacaac	TTAACAGGAATCA	tcgattcatccataaataat...52..gattgggggaaa	acaacaaa----
E. Cab	tgccttta	acttttagacaac...95..gcacacaggtgtgatacaac	TTAACAGGAATCA	tcgattcatccataaataat...52..gatcgggggaaa	acaacaaa----
S. Sus	tgccttta	acttttagacaac...95..gcacacaggtgtgatacaac	TTAACAGGAATCA	tcgattcatccataaataat...52..gattgggggaaa	acaacaaa----
*****	*****	*****	*****	*****	*** ** * **

id=566271 gene=ENSG00000215301 name=DDX3X segment=chrX_41207290_41207512.1 type=AN VIEW

Figure 225:



H. Sap	actgtatt	aagttaaagttc...1501...	-----acttcaaaa--cactgatgtga	AGTGTCCAGATTC	-tcag-----atgttt	gttgtgtgga...314...	aactgcacagtc	tcctttgt
P. Tro	actgtatt	aagttaaagttc...1497...	-----acttcaaaa--cactgatgtga	AGTGTCCAGATTC	-tcag-----atgttt	gttgtgtgaa...314...	aactgcacagtc	tcctttgt
P. Abe	actgtatt	aagttaaagttc...1496...	-----acttcaaaa--cactgatgtga	AGTGTCCAGATTC	-tcag-----atgttt	gttgtgtgaa...324...	aactgcacagtc	tcctttgt
C. Jac	actgtatt	aagttaaagttc...1502...	-----acttcaaaa--cactgatatga	AGTGTCCAGATTC	-tcag-----atgttt	gttgtgtgaa...319...	aactgcacagtc	tcctttgt
M. Mus	actgtatt	aagttaaagttc...1517...	-----acttcaaaa--cactgatata	AGTGTCCAGATTC	-tcag-----atgttt	gttgtgtgag...301...	aactgcacagtc	tcctttgt
R. Nor	actgtatt	aagttaaagttc...1515...	-----cttcaaaaa--cactgatata	AGTGTCCAGATTC	-tcag-----atgttt	gttgtgtgag...300...	aactgcacagtc	tcctttgt
C. Por	actgtatt	aagttaaagttc...1499...	gaaacacttcaaaa--cactga---	AGTGTCCAGATTC	-tcag-----atgttt	gttgtgtgag...310...	aactgcacagtc	tcctttgt
O. Cun	actgtatt	aagttaaagttc...1653...	g---acttgtacattcagcgata	GCATTGAGCAAGTTTA	tcagcaagcaatattt-----	tcag...165...	aactgcacagtc	tcctttgt
C. Fam	actgtatt	aagttaaagttc...1653...	g---acttgtacattcagcggca	GCATTGAGCAAGTTTA	tcagtaagcaatattt-----	tcag...164...	aactgcacagtc	tcctttgt
F. Cat	actgtatt	aagttaaagttc...1654...	g---acttgtacattcagcgata	GCATTGAGCAAGTTTA	tcagcaagcaatggtt-----	tcag...161...	aactgcacagtc	tcctttgt
B. Tau	actgtatt	aagttaaagttc...1649...	g---acttgtacattcagcgata	GCATTGAGCAAGTTTA	tcagcaagcaatattt-----	tcag...164...	aactgcacagtc	tcctttgt
E. Cab	actgtatt	aagttaaagttc...1649...	g---acttgtacattcagcgata	GCATTGAGCAAGTTTA	tcagcaagcaatattt-----	tcag...165...	aactgcacagtc	tcctttgt
S. Sus	actgtatt	aagttaaagttc...1656...	g---acttgtacattcagcgata	GCATTGAGCAAGTTTA	tcagcaagcaatattt-----	tcag...161...	aactgcacagtc	ttttgtg
O. Avi	actgtatt	aagttaaagttc...2066...	g---acttggacattcagcgata	GCATTGAGCAAGTTTA	tcagcaagcaatattt-----	tcag...160...	aactgcacagtc	tcctttgt
L. Afr	actgtatt	aagttaaagttc...1509...	-----acttcaaaa--cactgatata	AGTGTCCAGATTC	-tcag-----atgttt	gttgcgtgag...324...	aactgcacagtc	tcctttgt
	*****	***** *	* * * * *	* ** **	****	** ** *	*	***** * * *

id=566273 gene=ENSG00000215301 name=DDX3X segment=chrX_41207571.41209462.1 type=AN

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P. Tro	actgtatt	aagttaaagttc...1569...	-ttttgtttttt---tttcagt	-----GAATgtCTGGcACATT	gcaatcctcaaacatgtggt--	...239...	aactgcacagtc	tcctttgt
P. Abe	actgtatt	aagttaaagttc...1575...	-ttgtttttttt---tttcagt	-----GAATgtCTGGcACATT	gcaatcctcaaacatgtggt--	...242...	aactgcacagtc	tcctttgt
C. Jac	actgtatt	aagttaaagttc...1580...	-ttttgtttttt---tttcagt	-----GAATgtCTGGcACATT	gcaatcctcaaacatgtggt--	...238...	aactgcacagtc	tcctttgt
M. Mus	actgtatt	aagttaaagttc...1578...	-agttgtattttt---tttcagt	-----GAATgtCTGGcACATT	gcaatcctcaaacatgtggt--	...237...	aactgcacagtc	tcctttgt
R. Nor	actgtatt	aagttaaagttc...1575...	-tagttgta-tttt---tttcagt	-----GAATgtCTGGcACATT	gcaatcctcaaacatgtggt--	...237...	aactgcacagtc	tcctttgt
C. Por	actgtatt	aagttaaagttc...1564...	-gtgtgtattttt---tttcagt	-----GAATgtCTGGcACATT	gcaatcctcaaacatgtggt--	...242...	aactgcacagtc	tcctttgt
O. Cun	actgtatt	aagttaaagttc...1730...	-----aaatcatgtaagaatgggt	TAAACTTGCTGAATGT	-----aaagattgaacctcaagtca	...90...	aactgcacagtc	tcctttgt
C. Fam	actgtatt	aagttaaagttc...1729...	-----aaatcacataagaatggatt	TAAACTTGCTGAATGT	-----aaagattgaacctcaagtca	...90...	aactgcacagtc	tcctttgt
F. Cat	actgtatt	aagttaaagttc...1727...	-----aaatcacataagaatggatt	TAAACTTGCTGAATGT	-----aaagattgaacctcaagtca	...90...	aactgcacagtc	tcctttgt
B. Tau	actgtatt	aagttaaagttc...1726...	-----aaatcatgtaagaatgacgt	TAAACTTGCTGAATGT	-----aaagattgaacctcaagtca	...89...	aactgcacagtc	tcctttgt
E. Cab	actgtatt	aagttaaagttc...1726...	-----aaatcacataagaatggatt	TAAACTTGCTGAATGT	-----aaagattgaacctcaagtca	...90...	aactgcacagtc	tcctttgt
S. Sus	actgtatt	aagttaaagttc...1729...	-----aaatcacataagaatggatt	TAAACTTGCTGAATGT	-----aaagattgaacctcaagtca	...90...	aactgcacagtc	ttttgtg
O. Avi	actgtatt	aagttaaagttc...2139...	-tcaaaaatcatgtaagaa---gt	TAAACTTGCTGAATGT	-----aaagattgaacctcaagtca	...89...	aactgcacagtc	tcctttgt
L. Afr	actgtatt	aagttaaagttc...1582...	-ttttttttttt---tttcagt	-----GAATgtCTGGcACATT	gcaatcctcaaacatgtggt--	...248...	aactgcacagtc	tcctttgt
	*****	***** *	* * * * *	*****	** * ** *	**	*	***** * * *

id=566273 gene=ENSG00000215301 name=DDX3X segment=chrX_41207571.41209462.1 type=AN VIEW

Figure 226:



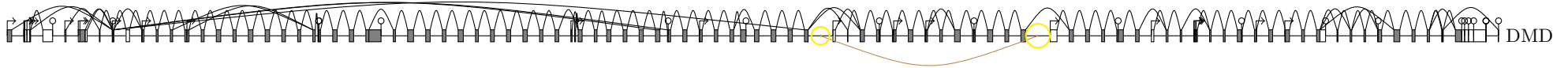
H. Sap	-c	aaatcac	aaaaaaaga-----gaaaagtg-ttttctaagctcatctgttggagtgagagggttca	GGGCTGTATTACAGAG	ttgctggcagtgcaaatagc----	...168...	tcttgaattta	gggatcat
R. Mac	-c	aaataac	aaaaaaaga-----gaaaatg-ttttctaagctcatctgttggagtgagagggttca	GGGCTGTATTACAGAG	ttgctggcagtgcaaatagc----	...168...	tcttgaattta	gggatcat
P. Tro	-c	aaatcac	aaaaaaaga-----gaaaagtg-ttttctaagctcatctgttggagtgagagggttca	GGGCTGTATTACAGAG	ttgctggcagtgcaaatagc----	...168...	tcttgaattta	gggatcat
P. Abe	-c	aaataac	aaaaaaaga-----gaaaagtg-ttttctaagctcatctgttggagtgagagggttca	GGGCTGTATTACAGAG	ttgctggcagtgcaaatagc----	...168...	tcttgaattta	gggatcat
C. Jac	-a	aaaacaa	aaaaaaaga-----gaaaatg-ttttctaagctcatttgttggagtgaga-ggttca	GGGCTGTATTACAGAG	ttgctggcagtgcaaatagc----	...168...	tcttgaattta	gggatcat
M. Mus	ca	aaaaaaa	aagaccaaacaaa-----caaaacaatg-atttctaag--tcatctgttggg---gagggctaa	GGGCTGTATTACAGAGCTGC	tgctggcagtgcaaatagcctttg...	...170...	tcttgtgatta	gggatcat
R. Nor	--	-----aa	gaaaccaaacaaa-----caaaacaatg-atttctaag--tcatctgttggg---gagggctaa	GGGCTGTATTACAGAG	ctgctggcagtgcaaatagc----	...174...	tcttgtgatta	gggatcat
O. Cun	c	aaaaaaa	aaacaaaaacaaa-----aaagaagatg--tttcaaag--tcttgttggagtgagagggttca	GGGCTGTATTACAGAG	ctgctggcagtgcaaatagc----	...172...	tcttgaattta	gggatcat
C. Fam	-c	aaaaaaa	aaaaaaaaaaagaagaaaaaagaagaaaaaagtgtgagagggtg-ttttctaag--tcatctgttggg	GGGCTGTATTACAGAG	ctgctggcagtgcaaatagc----	...171...	tcttgaattta	gggatcat
F. Cat	-c	aaaaaac	aaacaaaaacaaa-----tgtgagagggtg-ttttctaag--tcatctgttgggagt--gagggctca	GGGCTGTATTACAGAG	ctgctggcagtgcaaatagc----	...171...	tcttgaattta	gggatcat
B. Tau	-c	aaaaaaa	aaaaaa-----catgagagggtgttttctaag--tcatctgttggagtgaagagggttca	GGGCTGTATTACAGAG	ctgctggcagtgcaaatagc----	...171...	tcttgaattta	gggatcat
E. Cab	-c	aaaaaaa	aaaaaaaga-----tgtgagagggtg-ttttctaag--tcatctgttggagtgaagagggttca	GGGCTGTATTACAGAG	ctgctggcagtgcaaatagc----	...171...	tcttgaattta	gggatcat
S. Sus	gc	acacaaa	aaaaaga-----tgtgagagggtg-ttttctaag--tcatctgttactaagagggttca	GGGCTGTATTACAGAG	ctgctggcagtgcaaatagc----	...171...	tcttgaatcta	gggatcat
L. Afr	gt	aaagcaa	aaaaaa-----agagatg-ttttctaag--tcatctgttgtgta---gagggctca	GGGCTGTATTACAGAG	ctgctggcagtgcaaatagc----	...170...	tcttgaattta	gggatcat

id=698433 gene=ENSG00000109920 name=FBNP4 segment=chr11.47753115.47753384_-1 type=IN

H. Sap	c	aaatcac	aaaaaaagagaa...108...-----ttgtcaaagctccttgttgc	CTTTGTGAATaGCAGTCC	att---aagagggttcgctccctgt...80...tcttgaattta	gggatcat
R. Mac	c	aaataac	aaaaaaagagaa...108...-----ttgtcaaagctccttgttgc	CTTTGTGAATaGCAGTCC	att---aagagggttcgctccctgt...80...tcttgaattta	gggatcat
P. Tro	c	aaatcac	aaaaaaagagaa...108...-----ttgtcaaagctccttgttgc	CTTTGTGAATaGCAGTCC	att---aagagggttcgctccctgt...80...tcttgaattta	gggatcat
P. Abe	c	aaataac	aaaaaaagagaa...108...-----ttgtcaaagctccttgttgc	CTTTGTGAATaGCAGTCC	gtt---aagagggttcgctccctgt...80...tcttgaattta	gggatcat
C. Jac	a	aaaacaa	aaaaaaagagaa...106...-----ttgtcaaagctccttgttgc	CTTTGTGAATaGCAGTCC	gtt---aagagggttcgctccctgt...80...tcttgaattta	gggatcat
M. Mus	c	aaaaaaa	aaagaccaaca...105...cacaatgtcaaagctccttGTGGcCTTTGTGAATaGCAGTCC	-ataagaagagggttcgctccct--...86...tcttgtgatta	gggatcat	
R. Nor	a	agaaacc	aaacaaaaaaa...103...-----ttgtcaaagctccttgttgc	CTTTGTGAATaGCAGTCC	-atgagaagagggttcgctccct--...86...tcttgtgatta	gggatcat
O. Cun	c	aaaaaaa	aaacaaaaaaa...113...-----ttgtcaaagctccttgttgc	CTTTGTGAATaGCAGTCC	attaagaagagggttcgctccc---...84...tcttgaattta	gggatcat
C. Fam	c	aaaaaaa	aaaaaaaaaaaa...134...-----ttgtcaaagctccttgttgc	CTTTGTGAATaGCAGTCC	attaagaagagggttcgctccc---...83...tcttgaattta	gggatcat
F. Cat	c	aaaaaac	aaacaaaaaaa...112...-----ttgtcaaagctccttgttgc	CTTTGTGAATaGCAGTCC	attaagaagagggttcgctccc---...83...tcttgaattta	gggatcat
B. Tau	c	aaaaaaa	aaaaaacatgag...107...-----ttgtcaaagctccttgttgc	CTTTGTGAATaGCAGTCC	attaagaagcgggttcgctccc---...83...tcttgaattta	gggatcat
E. Cab	c	aaaaaaa	aaaaaaaaagat...111...-----ttgtcaaagctccttgttgc	CTTTGTGAATaGCAGTCC	gtaagaagagggttcgctccc---...83...tcttgaattta	gggatcat
S. Sus	g	cacacaa	aaaaaaagatgt...109...-----ttgtcaaagctccttgttgc	CTTTGTGAATaGCAGTCC	attaagaagagggttcgctccc---...83...tcttgaatcta	gggatcat
L. Afr	g	taagcaa	aaaaaaagaa...102...-----ttgtcaaagctccttgttgc	CTTTGTGAATaGCAGTCC	attaagaagagggttcgctccc---...82...tcttgaattta	gggatcat

id=698433 gene=ENSG00000109920 name=FBNP4 segment=chr11.47753115.47753384_-1 type=IN VIEW

Figure 228:



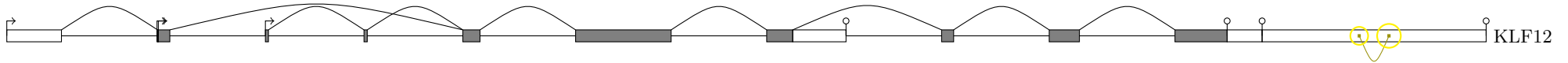
H. Sap	atc	ttaag	gtaagtc	tttga...	4939...	tgatgtg	ccattcag	catcc	CAGCAGCTCTTTCTCTT	c	acactagc
P. Tro	atc	ttaag	gtaagtc	tttga...	4939...	tgatgtg	ccattcag	catcc	CAGCAGCTCTTTCTCTT	c	acactagc
P. Abe	acc	ttaag	gtaagtc	tttga...	4939...	tgatgtg	ccattcag	catcc	CAGCAGCTCTTTCTCTT	c	acactagc
C. Jac	atc	ttaag	gtaagtt	tttga...	4939...	tgatgtg	ccattcag	catcc	CAGCAGCTCTTTCTCTT	c	acactagc
M. Mus	atc	ttaag	gtaagact	tttga...	4940...	-gatgtg	ccattcag	catccc	AGCAGCTCTTTCTCTT	c	aCACTagc
R. Nor	atc	ttaag	gtaagact	tttga...	4940...	-gatgtg	ccattcag	catccc	AGCAGCTCTTTCTCTT	c	acactagc
C. Por	atc	ttaag	gtatgatt	tttga...	4940...	-gatgtg	ccactcag	catccc	AGCAGCTCTTTCTCTT	c	acactagc
O. Cun	atc	ttaag	gtaggttt	tat...	4940...	-gatgtg	ccattcag	catccc	AGCAGCTCTTTCTCTT	c	acactagc
C. Fam	atc	ttaag	gtaaggt	tttga...	4939...	tgatgtg	ccattcag	catcc	CAGCAGCTCTTTCTCTT	c	acactagc
F. Cat	gtc	ttaag	gtaaggt	tttga...	4940...	-gatgtg	ccattcag	catccc	AGCAGCTCTTTCTCTT	c	acactagc
E. Cab	acc	ttaag	gtcagtt	tttga...	4940...	-gatgtg	ccattcag	catccc	AGCAGCTCTTTCTCTT	c	acactagc
L. Afr	atc	ttaag	gtatgtt	ttt...	4940...	-ggtgt	accattcag	catccc	AGCAGCTCTTTCTCTT	c	acactagc
	*	*****	**	*	***		*	***	***	*****	*****

id=754949 gene=ENSG00000198947 name=DMD segment=chrX.32173587.32235032.-1 type=IN

H. Sap	aatggcaa	gtaagtc	caggca...	4923...	-----	gcttg	taatgg	cagaat	gat	AAGAAAAGTTGGCTGTT	taatataa	actgtc	agtt	tgcatatt
P. Tro	aatggcaa	gtaagtc	caggca...	4923...	-----	gcttg	taatgg	cagaat	gat	AAGAAAAGTTGGCTGTT	taatataa	actgtc	agtt	tgcatatt
P. Abe	aatggcaa	gtaagtc	caggca...	4923...	-----	gcttg	taatgg	cagaat	gat	AAGAAAAGTTGGCTGTT	taatataa	actgtc	agtt	tgcatatt
C. Jac	aatggcag	gtaagtc	caagca...	4923...	-----	gcttg	taatgg	cagaat	gat	AAGAAAAGTTGGCTGTT	taatataa	actgtc	agtt	tgcatatt
M. Mus	catggcaa	gtaagtt	gagtg...	4917...	tctct	gcctt	atattg	gcaa	AGTGat	AAGAAAAGttGGCTGTT	taatataa	actgtc	agtt	tgcatatt
R. Nor	catggcaa	gtaagtt	gagtg...	4923...	-----	cctt	atattg	cagaat	gat	AAGAAAAGttGGCTGTT	taatataa	actgtc	agtt	tgcatatt
C. Por	agtggcaa	gtaagt	gaagcc...	4923...	-----	gcttg	taatgg	cagaat	gat	AAGAAAAGttGGCTGTT	taatataa	actgtc	agtt	tgcatatt
O. Cun	aatggcaa	gtaagt	caagtg...	4923...	-----	gcttg	taatgg	cagaat	gat	AAGAAAAGttGGCTGTT	taatataa	actgtc	agtt	tgcatatt
C. Fam	aatggcaa	gtaagt	aaagct...	4923...	-----	gctt	ataatg	cagaat	gat	AAGAAAAGTTGGCTGTT	taatataa	actgtc	agtt	tgcatatt
F. Cat	aatggcaa	gtaagt	aaagct...	4923...	-----	gctt	ataatg	cagaat	gat	AAGAAAAGttGGCTGTT	catataa	actgtc	agtt	tgcatatt
E. Cab	aatggcag	gtaagt	caagtg...	4923...	-----	gctt	ataatg	cagaat	gat	AAGAAAAGttGGCTGTT	taatataa	actgtc	agtt	tgcatatt
L. Afr	aatggcaa	gtaagt	caagca...	4923...	-----	gctt	ataatg	cagaat	gat	AAGAAAAGttGGCTGTT	taatataa	actgtc	agtt	tgcatatt
	*****	*****	*			***	*	*****	*	*****	*****	*	*****	

id=754980 gene=ENSG00000198947 name=DMD segment=chrX.31526599.31645789.-1 type=IN VIEW

Figure 229: CS=9.36



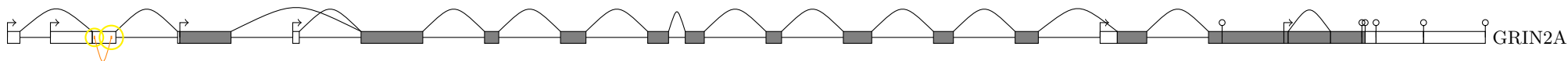
H. Sap	tgccattt-aaagatgtttgt...4748...-----ctcagaggatgattattcca-----GTCTATTCTCAGAGATTtaaatgaacaagtgttattg...160...tatggaacaaaa	ctccctaa						
R. Mac	tgccattt-aaagatgtttgt...4747...-----ctcagaggatgattattcca-----GTCTATTCTCAGAGATTtaaatgaacaagtgttattg...161...tatggaacaaaa	ctccctaa						
P. Tro	tgccattt-aaagatgtttgt...4748...-----ctcagaggatgattattcca-----GTCTATTCTCAGAGATTtaaatgaacaagtgttattg...160...tatggaacaaaa	ctccctaa						
P. Abe	tgccattt-aaagatgtttgt...4748...-----ctcagaggatgattattcca-----GTCTATTCTCAGAGATTtaaatgaacaagtgttattg...160...tatggaacaaaa	ctccctaa						
C. Jac	tgccattt-aaagatgtttgt...4748...-----ctcagaggatgattattcca-----GTCTATTCTCAGAGATTtaaatgaacaagtgttattg...160...tatggaacaaaa	ctccctaa						
M. Mus	tgccattga-aaagatgtttg...4873...-----gagctgtgaactgaaatagaGTTTAAACCTTTA--ctgtatgcatttgtataatt...38...tatggaacaaga	ctccctaa						
R. Nor	tgccattga-aaagatgtttg...4748...agattctctcag-----ttattcca-----GTCTATTCTCAGAGATTtaaatgaacaagtgttatcg...160...tatggaacaaga	ctccctaa						
C. Por	tgccattt-aaagatgtttgt...4748...-----ctcagaggatgattattcca-----GTCTATTCTCAGAGATTtaaatgaacaagtgttatcg...160...tatggaacaaaa	ctccctaa						
O. Cun	tgccattt-aaagatgtttgt...4748...-----ctcagaggatgattattcca-----GTCTATTCTCAGAGATTtaaatgaacaagtgttaccg...160...tatggaacaaca	ctccctaa						
C. Fam	tgccattt-caagatgtttgt...4748...-----ctcagaggatgattattcca-----GTCTATTCTCAGAGATTtaaatgaacaagtgttatcg...160...tatggaacaaaa	ctccctaa						
F. Cat	gcccattt-caagatgattgt...4748...-----ctcagaggatgattattcca-----GTCTATTCTCAGAGATTtaaatgaacaagtgttatcg...160...tatggaacaaaa	ctccctaa						
B. Tau	tgccattt-caagatgtttgt...4748...-----ctcagaggatgattattcca-----GTCTATTCTCAGAGATTtaaatgaacaagtgttatcg...160...tatggaacgaaa	ctccctaa						
E. Cab	tgccattt-aaagatgtttgt...4873...-----gagctgtgaaccgaaatagaGTTTAAACCTTTA--actgtatgcatttgtataat...39...tatggaacaaaa	ctccctaa						
L. Afr	tgccattt-aaagatgtttgt...4748...-----ctcagaggatgattattcca-----GTCTATTCTCAGAGATTtaaatgaacaagtgttatcg...160...tatggaacaaaa	ctccctaa						
	****	***** **	* * *	** * *	* * *	***** * * *	***** * *	**** **

id=367800 gene=ENSG00000118922 name=KLF12 segment=chr13.74260226.74269352.-1 type=E3

H. Sap	tgccattt-aaagatgtttgt...4903...ttaactgtatgcatttgtatAATTaTCTGAATGaAGGCatgaaggtaaataaagcattttgtatggaacaaaa	ctccctaa						
R. Mac	tgccattt-aaagatgtttgt...4903...ttaactgtatgcatttgtatAATTaTCTGAATGaAGGCatgaaggtaaataaagcattttgtatggaacaaaa	ctccctaa						
P. Tro	tgccattt-aaagatgtttgt...4903...ttaactgtatgcatttgtatAATTaTCTGAATGaAGGCatgaaggtaaataaagcattttgtatggaacaaaa	ctccctaa						
P. Abe	tgccattt-aaagatgtttgt...4903...ttaactgtatgcatttgtatAATTaTCTGAATGaAGGCatgaaggtaaataaagcattttgtatggaacaaaa	ctccctaa						
C. Jac	tgccattt-aaagatgtttgt...4903...ttaactgtatgcatttgtatAATTaTCTGAATGaAGGCatgaaggtaaataaagcattttgtatggaacaaaa	ctccctaa						
M. Mus	tgccattga-aaagatgtttg...4921...ataattatctgaatgaaggc-----ATGAAGGTTAAAT-----aaagcattttgtatggaacaaga	ctccctaa						
R. Nor	tgccattga-aaagatgtttg...4903...ttatctgtatgcatttgtatAATTaTCTGAATGaAGGCatgaaggtaaataaagcattttgtatggaacaaga	ctccctaa						
C. Por	tgccattt-aaagatgtttgt...4903...ttaactgtatgcatttgtatAATTaTCTGAATGaAGGCatgaaggtaaataaagcattttgtatggaacaaaa	ctccctaa						
O. Cun	tgccattt-aaagatgtttgt...4903...ttaactgtatgcatttgtatAATTaTCTGAATGaAGGCatgaaggtaaataaagcattttgtatggaacaaca	ctccctaa						
C. Fam	tgccattt-caagatgtttgt...4903...ttaactgtatgcatttgtatAATTaTCTGAATGaAGGCatgaaggtaaataaagcattttgtatggaacaaaa	ctccctaa						
F. Cat	gcccattt-caagatgattgt...4903...ttaactgtatgcatttgtatAATTaTCTGAATGaAGGCatgaaggtaaataaagcattttgtatggaacaaaa	ctccctaa						
B. Tau	tgccattt-caagatgtttgt...4903...ttaactgtatgcatttgtatAATTaTCTGAATGaAGGCatgaaggtaaataaagcattttgtatggaacgaaa	ctccctaa						
E. Cab	tgccattt-aaagatgtttgt...4922...-taattatctgaatgaaggc-----TGAAGGTTAAAT-----aaagcattttgtatggaacaaaa	ctccctaa						
L. Afr	tgccattt-aaagatgtttgt...4903...ttaactgtatgcatttgtatAATTaTCTGAATGaAGGCatgaaggtaaataaagcattttgtatggaacaaaa	ctccctaa						
	****	***** **	* * * * *	*****	*	***** * * *	***** * *	**** **

id=367800 gene=ENSG00000118922 name=KLF12 segment=chr13.74260226.74269352.-1 type=E3 VIEW

Figure 230:



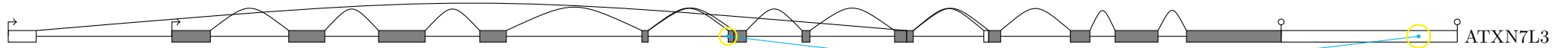
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P. Tro	cccgttag	agcc-CTGCTGCA-GAGC	ctcc--ggctgggatagccgcc...143...cttgggctacag	gtacgtcc
P. Abe	cccgttag	agcc-CTGCTGCA-GAGC	ctcc--ggctgggatagccgcc...143...ctctggctacag	gtacgtcc
M. Mus	cccgttag	agcc-CTGCTGCA-GAGC	ctcc--ggctgggatagccgcc...143...ctcggctacag	gtacgtcc
R. Nor	ctggtag	agcc-CTGCTGCA-GAGC	ctcc--ggctgggatagccgcc...143...ctcggctacag	gtatgtct
C. Por	cctgctag	agcccCTGCTGCAgGAGC	ctcccggcctgggatagc--cc...148...ctcggctacag	gtaagtcc
O. Cun	cccgttag	agcc-CTGCTGCA-GAGC	ctcc--ggctgggatagccgcc...143...ctcgggctacag	gtacgccc
C. Fam	cccgttag	agcc-CTGCTGCA-GAGC	ctcc--ggctgggatagccgcc...143...ctcgggctacag	gtacgtcc
F. Cat	cccgttag	agcc-CTGCTGCA-GAGC	ctcc--ggctgggatagccgcc...143...ctcgggctacag	gtacgtcc
B. Tau	ctcgtag	agcc-CTGCTGCA-GAGC	ctcc--ggctgggatagccgcc...143...ctctggctacag	gtacgtcc
E. Cab	tccgtag	agcc-CTGCTGCA-GAGC	ctcc--ggctgggatagccgcc...143...ctcgggctacag	gtacgtcc
S. Sus	cctgtag	agcc-CTGCTGCA-GAGC	ctcc--ggctgggatagccgcc...143...ctcgggctacag	gtacgacc
O. Avi	ctcgtag	agcc-CTGCTGCA-GAGC	ctcc--ggctgggatagccgcc...142...ctctggctacag	gtacgtcc
		* **	*** *****	***** * ** ***** ** ** *****

id=671091 gene=ENSG00000183454 name=GRIN2A segment=chr16_10275734_10275924_-1 type=E5

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P. Tro	cccgttag	ag-ccctgctgca...108...gctgctgaggcggccgagatGCTCgTGCGcGCAG	cgccccactgcatcctcgaccttctcgggctacag	gtacgtcc
P. Abe	cccgttag	ag-ccctgctgca...108...gctgctgaggcggccgagatGCTCgTGCGcGCAG	cgccccactgcatcctcgaccttctcgggctacag	gtacgtcc
M. Mus	cccgttag	ag-ccctgctgca...108...gctgctgaggcggccgagatGCTCgTGCGcGCAG	cagccccattgcatcctccaccttctcgggctacag	gtacgtcc
R. Nor	ctggtag	ag-ccctgctgca...108...gctgctgaggcggccgagatGCTCgTGCGcGCAG	cagccccattgcatcctccaccttctcgggctacag	gtatgtct
C. Por	cctgctag	agcccctgctgc-...115...gctgctgaggcggccgagatGCTCgTGCGcGCAG	cgccccactgcatccagaccttctcgggctacag	gtaagtcc
O. Cun	cccgttag	ag-ccctgctgca...108...gctgctgaggcggccgagatGCTCgTGCGcGCAG	cgccccaccgcatcctcgaccttctcgggctacag	gtacgccc
C. Fam	cccgttag	ag-ccctgctgca...108...gctgctgaggcggccgagatGCTCgTGCGcGCAG	cgccccactgcatcctcgaccttctcgggctacag	gtacgtcc
F. Cat	cccgttag	ag-ccctgctgca...108...gctgctgaggcggccgagatGCTCgTGCGcGCAG	cgccccactgcatcctcgaccttctcgggctacag	gtacgtcc
B. Tau	ctcgtag	ag-ccctgctgca...108...gctgctgaggcggccgagatGCTCgTGCGcGCAG	cgccccaccgcatcctcgaccttctcgggctacag	gtacgtcc
E. Cab	tccgtag	ag-ccctgctgca...108...gctgctgaggcggccgagatGCTCgTGCGcGCAG	cgccccactgcatcctcgaccttctcgggctacag	gtacgtcc
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O. Avi	ctcgtag	ag-ccctgctgca...107...gctgctgaggcggccgagatGCTCgTGCGcGCAG	cgccccaccgcatcctcgaccttctcgggctacag	gtacgtcc
		* **	** *****	***** ***** * ***** *****

id=671091 gene=ENSG00000183454 name=GRIN2A segment=chr16_10275734_10275924_-1 type=E5 VIEW

Figure 231:



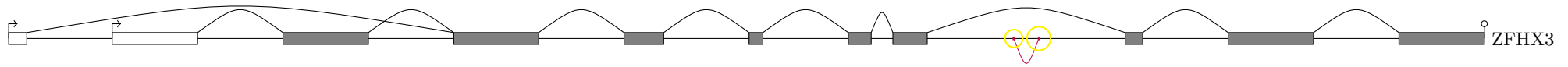
H. Sap	cagacaag	gtgagagccggg...246...---	ttctcggctcccccttttcg	TTACCCCTTCCCCAA	ag	ctatggta
R. Mac	cagacaag	gtgagagccggg...236...---	ttctcggctcccccttatcg	TTACCCCTTCCCCAA	ag	ctatggta
P. Abe	cagacaag	gtgagagctggg...244...---	tatcggctcccccttatcg	TTACCCCTTCCCCAA	ag	ctatggta
C. Jac	cagacaag	gtgagagctggg...222...---	ttctcggctcccccttatcg	TTACCCCTTCCCCAA	ag	ctatggta
M. Mus	cagacaag	gtgagagctggg...254...---	ttctcggctcccccttatca	TTGCCCTTCCCCAA	ag	ctatggta
R. Nor	cagacaag	gtgagagccggg...254...---	ttctcggctcccccttatca	TTGCCCTTCCCCAA	ag	ctatggta
O. Cun	cagacaag	gtgagagctggg...217...---	ttctcggctcccccttatcg	TTACCCCTTCCCCAA	ag	ctatggta
C. Fam	cggacaag	gtgagagccggg...258...---	ttctcggctcccccttatcg	TTACCCCTTCCCCAA	ag	ctgtggta
F. Cat	cagacaag	gtgagagccggg...258...---	ttctcggctcccccttatcg	TTACCCCTTCCCCAA	ag	ctatggta
B. Tau	cagacaag	gtgagagctggg...251...---	ttctcggctcccccttatcg	TTACCCCTTCCCCAA	ag	ctatggta
E. Cab	cagataag	gtgagagccggg...256...---	ttctcggctcccccttatcg	TTACCCCTTCCCCAA	ag	ctatggta
O. Avi	cagacaag	gnnnnnnnnn...251...---	ttctcggctcccccttatcg	TTACCCCTTCCCCAA	ag	ctatggta
L. Afr	cagacaag	gtgagagctggg...251...gggt	ttctcggctccccctta	TCGTtaCCCTTCCCCAA	ag	ctatggta
	* * * * *		** * * * * * * * * * *			** * * * *

id=128341 gene=ENSG0000087152 name=ATXN7L3 segment=chr17_42273469_42273763_-1 type=IN

H. Sap	gcgtgcag	gactcagacctg...2068...attaccgcatgctgggggtca	TTGGGGGA	-ggGGGGTGG	ggctcacgctgtcctgtggt...108...tctccggtggt	agccccgg
R. Mac	gcgtgcag	gactcagacctg...2076...attaccgcatgctgggggtca	TTGGGGGA	-ggGGGGTGG	ggctcacgctgtcctgtggt...108...tctccggtggt	agccccgg
P. Abe	gcgtgcag	gactcagacctg...2056...attaccgcatgctgggggtca	TTGGGGGA	-ggGGGGTGG	ggctcacgctgtcctgtggt...108...tctccggtggt	agccccgg
C. Jac	gcgtgcag	gactcagacctg...2075...attaccgcatgctgggggtca	TTGGGGGA	-ggGGGGTGG	ggctcacgctgtcctgtggt...108...tctccggtggt	agccccgg
M. Mus	gcgtgcgg	gactcagacctg...1965...attaccgcatgctgggggtca	TTGGGGGA	-ggGGGGTGG	ggctcacgctgtcctgtggt...109...tctccggtggt	agccccgg
R. Nor	gcgtgcag	gactcagacctg...1988...attaccgcatgctgggggtca	TTGGGGGA	-ggGGGGTGG	ggctcacgctgtcctgtggt...109...tctccggtggt	agccccgg
O. Cun	gcgtgcgg	gactcagacctg...1973...attaccgcatgctgggggtca	TTGGGGGA	-ggGGGGTGG	ggctcacgctgtcctgtggt...108...tctccggtggt	agccccgg
C. Fam	gcatgcag	gactcagacctg...2120...attaccgcatgctgggggtca	TTGGGGGA	-ggGGGGTGG	ggctcacgctgtcctgtggt...108...tctccggtggt	agccccgg
F. Cat	gcatgcag	gactcagacctg...1762...attaccgcatgctgggggtca	TTGGGGGA	-ggGGGGTGG	ggctcacgctgtcctgtggt...108...tctccggtggt	agccccgg
B. Tau	gcgtgcag	gactcagacctg...2093...attaccgcatgctgggggtca	TTGGGGGA	-ggGGGGTGG	ggctcacgctgtcctgtggt...108...tctccggtggt	agccccgg
E. Cab	gcatgcag	gactcagacctg...2101...attaccgcatgctgggggtca	TTGGGGGA	-ggGGGGTGG	ggctcacgctgtcctgtggt...108...tctccggtggt	agccccgg
O. Avi	gcgtgcag	gactcagacctg...2093...attaccgcatgctgggggtca	TTGGGGGA	-ggGGGGTGG	ggctcacgctgtcctgtggt...108...tctccggtggt	agccccgg
L. Afr	gcgtacag	gactcagacctg...2034...attaccgcatgctgggggtca	TTGGGGGA	-ggGGGGTGG	ggctcacactgtcctgtggt...107...tctccggtggt	agccccgg
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id=128358 gene=ENSG0000087152 name=ATXN7L3 segment=chr17_42269174_42271430_-1 type=E3 VIEW

Figure 232: CS=3.9



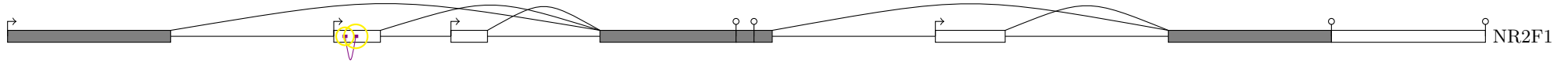
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R. Mac	ttatgacg	gtaaggcagcca...4647...	tcaacttatctacctaattg	GTTGcACAAgaAGTTtCACA	gccccatgacaaaacattgtc...	258...	tgctcttctcag	gtgaccac
P. Tro	ttatgacg	gtaaggcagcca...4638...	tcaacttatctacctaattg	GTTGcACAAgaAGTTtCACA	gccccatgacaaaacattgtc...	267...	cttgctcctcag	gtgaccac
P. Abe	ttatgacg	gtaaggcagcca...4638...	tcaacttatctacctaattg	GTTGcACAAgaAGTTtCACA	gccccatgacaaaacattgtc...	267...	cttgctcctcag	gtgaccac
C. Jac	ttatgacg	gtaaggcagcca...4640...	tcaacttatctacctaattg	GTTGcACAAgaAGTTtCACA	gccccatgacaaaacattgtc...	265...	cttgctcctcag	gtgaccac
R. Nor	ttatgacg	gtaaggcagcca...4633...	----t	tatctacctaattggctgcACAAgaAGTTtCACA	gccccatgacaaaacattgtc...	277...	ctgtcccctcag	gtgaccgc
C. Por	ttatgacg	gtaagggtggcca...4635...	tcaacttatctacctaattg	GTTGcACAAgaAGTTtCACA	gccccatgacaaaacattgtc...	270...	cttgctcctcag	gtgaccac
O. Cun	tcatgacg	gtaagacagcca...4648...	tcaacttatccacctaattg	GTTGcACAAgaAGTTtCACA	gccccatgacaaaacattgtc...	257...	ctgtgtcctcag	gtgaccac
C. Fam	ttatgacg	gtaaggcagcca...4630...	tcaacttatctacctaattg	GTTGcACAAgaAGTTtCACA	gccccatgacaaaacattgtc...	275...	cttactcctcag	gtgaccac
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L. Afr	ttatgacg	gtaaggcaccag...4631...	tcaacttatctacctaattg	GTTGcACAAgaAGTTtCACA	gccccatgacaaaacattgtc...	274...	ctcactcctcag	gtgaccac
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P. Tro	ttatgacg	gtaaggcagcca...4791...	gtagaaacacttttgactga	TGTGAGCTTTGTcTAAT	aaacatgaatcttcagtgag...	117...	cttgctcctcag	gtgaccac
P. Abe	ttatgacg	gtaaggcagcca...4791...	gtagaaacacttttgactga	TGTGAGCTTTGTcTAAT	aaacatgaatcttcagtgag...	117...	cttgctcctcag	gtgaccac
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B. Tau	tcatgacg	gtaaggcggcgg...4783...	gtagaaacacttttgactga	TGTGAGCTTTGTcTAAT	aaacatgaatcttcagtgag...	125...	cttgctcttcag	gtgaccac
E. Cab	ttatgacg	gtaaggcagcca...4785...	gtagaaacacttttgactga	TGTGAGCTTTGTcTAAT	aaacatgaatcttcagtgag...	123...	tttgctcttcag	gtgaccac
S. Sus	tcatgacg	gtagggtgtgcg...4783...	gtagaaacacttttgactga	TGTGAGCTTTGTcTAAT	aaacatgagcttcagtgag...	125...	cctgctcttcag	gtgactac
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id=503653 gene=ENSG00000140836 name=ZFH3 segment=chr16.72834029.72845475_-1 type=IN VIEW

Figure 233:



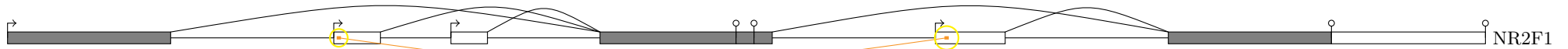
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P. Tro	cgttttgc	attcagatggtaaatgaat	CCAGtg	TTTTTCAGT	tgaagctcgtgcattcact...76...tgtttggtact	gtaagttc
P. Abe	cgttttgc	attcagatggtaaatgaat	CCAGtg	TTTTTCAGT	tgaagctcgtgcattcact...76...tgtttggtact	gtaagttc
C. Jac	cgttttgc	attcagatggtaaatgaat	CCAGtg	TTTTTCAGT	tgaagctcgtgcattcact...76...tgtttggtact	gtaagttc
M. Mus	cgttttgc	attcagatgggtaaatgaat	CCAGtg	TTTTTCAGT	tgaagctcgtgcattcact...75...tgtttggtact	gtaagttc
R. Nor	cgttttgc	atgcagatggtaaatgaat	CCAGtg	TTTTTCAGT	tgaagctcgtgcattcact...75...tgtttggtact	gtaagttc
C. Por	cgttttgc	attcagatggtaaatgaat	CCAGtg	TTTTTCAGT	tgaagctcgtgcattcact...75...tgtttggtact	gtaagttc
O. Cun	cgttttgc	attcagatggtaaatgaat	CCAGtg	TTTTTCAGT	tgaagctcgtgcattcact...76...tgtttggtact	gtaagttc
C. Fam	cgttttgc	attcagatggtaaatgaat	CCAGtg	TTTTTCAGT	tgaagctcgtgcattcact...76...tgtttggtact	gtaagttc
F. Cat	cgttttgc	attcagatggtaaatgaat	CCAGtg	TTTTTCAGT	tgaagctcgtgcattcact...76...tgtttggtact	gtaagttc
B. Tau	cgttctgc	attcagatggtaaatgaat	CCAGtg	TTTTTCAGT	tgaagctcgtgcattcact...76...tgtttggtact	gtaagttc
E. Cab	cgttttgc	attcagatggtaaatgaat	CCAGtg	TTTTTCAGT	tgaagctcgtgcattcact...76...tgtttggtact	gtaagttc
S. Sus	cgttttgc	attcagatggtaaatgaat	CCAGtg	TTTTTCAGT	tgaagctcgtgcattcact...76...tgtttggtact	gtaagttc
O. Avi	cgttctgc	attcagatggtaaatgaat	CCAGtg	TTTTTCAGT	tgaagctcgtgcattcact...76...tgtttggtact	gtaagttc
L. Afr	cgttttgc	attcagatggtaaatgaat	CCAGtg	TTTTTCAGT	tgaagctcgtgcattcact...76...tgtttggtact	gtaagttc
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id=722957 gene=ENSG00000175745 name=NR2F1 segment=chr5_92922807_92922949_1 type=AN

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R. Mac	cgttttgc	attcagatggtaaatgaat	ccagtg	tttttcagtg	tgaagctcgtgcattc	ACTGgg	CAAAAGCTGG	ctgcaggttg	cagtgccacc...43...tgtttggtact	gtaagttc
P. Tro	cgttttgc	attcagatggtaaatgaat	ccagtg	tttttcagtg	tgaagctcgtgcattc	ACTGgg	CAAAAGCTGG	ctgcaggttg	cagtgccacc...43...tgtttggtact	gtaagttc
P. Abe	cgttttgc	attcagatggtaaatgaat	ccagtg	tttttcagtg	tgaagctcgtgcattc	ACTGgg	CAAAAGCTGG	ctgcaggttg	cagtgccacc...43...tgtttggtact	gtaagttc
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M. Mus	cgttttgc	attcagatgggtaaatgaat	ccagtg	tttttcagtg	tgaagctcgtgcattc	ACTGgg	C-AAAGCTGG	ctgcaggttg	cagtgccacc...43...tgtttggtact	gtaagttc
R. Nor	cgttttgc	atgcagatggtaaatgaat	ccagtg	tttttcagtg	tgaagctcgtgcattc	ACTGgg	C-AAAGCTGG	ctgcaggttg	cagtgccacc...43...tgtttggtact	gtaagttc
C. Por	cgttttgc	attcagatggtaaatgaat	ccagtg	tttttcagtg	tgaagctcgtgcattc	ACTGgg	C-AAAGCTGG	ctgcaggttg	cagtgccacc...43...tgtttggtact	gtaagttc
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F. Cat	cgttttgc	attcagatggtaaatgaat	ccagtg	tttttcagtg	tgaagctcgtgcattc	ACTGgg	CAAAAGCTGG	ctgcaggttg	cagtgccacc...43...tgtttggtact	gtaagttc
B. Tau	cgttctgc	attcagatggtaaatgaat	ccagtg	tttttcagtg	tgaagctcgtgcattc	ACTGgg	CAAAAGCTGG	ctgcaggttg	cagtgccacc...43...tgtttggtact	gtaagttc
E. Cab	cgttttgc	attcagatggtaaatgaat	ccagtg	tttttcagtg	tgaagctcgtgcattc	ACTGgg	CAAAAGCTGG	ctgcaggttg	cagtgccacc...43...tgtttggtact	gtaagttc
S. Sus	cgttttgc	attcagatggtaaatgaat	ccagtg	tttttcagtg	tgaagctcgtgcattc	ACTGgg	CAAAAGCTGG	ctgcaggttg	cagtgccacc...43...tgtttggtact	gtaagttc
O. Avi	cgttctgc	attcagatggtaaatgaat	ccagtg	tttttcagtg	tgaagctcgtgcattc	ACTGgg	CAAAAGCTGG	ctgcaggttg	cagtgccacc...43...tgtttggtact	gtaagttc
L. Afr	cgttttgc	attcagatggtaaatgaat	ccagtg	tttttcagtg	tgaagctcgtgcattc	ACTGgg	CAAAAGCTGG	ctgcaggttg	cagtgccacc...43...tgtttggtact	gtaagttc
**** **										
** ***** ***** ***** ***** * ** ***** ***** *****										

id=722957 gene=ENSG00000175745 name=NR2F1 segment=chr5_92922807_92922949_1 type=AN VIEW

Figure 234:



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R. Mac  cgttttgc aATTCAGATGgTAAATgaatccagtgttttgcagt-----...96...tgtttggctact gtaagttc
P. Tro  cgttttgc aATTCAGATGgTAAATgaatccagtgttttgcagt-----...96...tgtttggctact gtaagttc
P. Abe  cgttttgc aATTCAGATGgTAAATgaatccagtgttttgcagt-----...96...tgtttggctact gtaagttc
C. Jac  cgttttgc aATTCAGATGgTAAATgaatccagtgttttgcagt-----...96...tgtttggctact gtaagttc
M. Mus  cgttttgc aATTCAGATGgTAATgaatccagtgttttgcagt-----...95...tgtttggctact gtaagttc
C. Por  cgttttgc aATTCAGATGgTAAATgaatccagtgttttgcagt-----...95...tgtttggctact gtaagttc
O. Cun  cgttttgc aATTCAGATGgTAAATgaatccagtgttttgcagt-----...96...tgtttggctact gtaagttc
C. Fam  cgttttgc aATTCAGATGgTAAATgaatccagtgttttgcagt-----...96...tgtttggctact gtaagttc
F. Cat  cgttttgc aATTCAGATGgTAAATgaatccagtgttttgcagt-----...96...tgtttggctact gtaagttc
E. Cab  cgttTTGC aATTCAGATGgTAAATgaatccagtgttttgcagt-----...96...tgtttggctact gtaagttc
S. Sus  cgttttgc aATTCAGATGgTAAATgaatccagtg-ttttgcagtt-----...95...tgtttggctact gtaagttc
O. Avi  cgttctgc aATTCAGATGgTAAATGATCCAGTgttttgcagttgcaagctc...87...tgtttggctact gtaagttc
L. Afr  cgttttgc aATTCAGATGgTAAATgaatccagtgttttgcagt-----...96...tgtttggctact gtaagttc
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id=722957 gene=ENSG00000175745 name=NR2F1 segment=chr5_92922807_92922949.1 type=AN

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R. Mac  ggatatac ccaactggctagctggagtaATTAGaCATCTGAGaggaaacct-agtctgtatctg----...148...cagcagacacag gtttcgct
P. Tro  ggatatac ccaactggctggctggagtaATTAGaCATCTGAGaggaaacct-agtctgtatctg----...148...cagcagacacag gtttcact
P. Abe  ggatatac ccaactggctggctggagtaATTAGaCATCTGAGaggaaacct-agtctgtatctg----...148...cagcagacacag gtttcgct
C. Jac  ggatatac ccaattggctggctggagtaATTAGaCATCTGAGaggaaacct-agtctgtatctg----...149...cagcagacacat gttttgct
M. Mus  ggatgcac tgcaccagctggatgcagtaATTAGaCATCTGAGaggaaacct-agtctggactg----...143...cagcagacatag atttcgct
C. Por  ggatgcac tgcaccagctggatgcagtaATTAGaCATCTGAGaggaaacct-agtctgaactgg----...147...tagccgacactg gttttgct
O. Cun  ggatgtac ccagccaactggctggagtaATTAGaCATCTGAGggagagccc-agtctagctcgg----...147...cagcagacacag gttttgct
C. Fam  ggatgcac ccgagtggctggcaggagtaATTAGaCATCTGAGaggaaacct-attctggatcta----...151...aagcagacacgg gcttcact
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L. Afr  agatgcgc cccagcagctggctagagtaATTAGaCATCTGAGaggaaacct-agtctggatctg----...148...cagcagacacag gctttcct
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Figure 235:



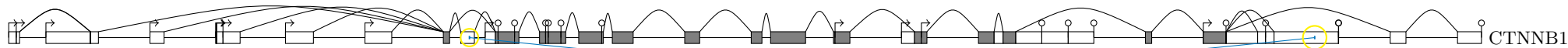
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R. Nor	gggctgag	gtccgctcact...216...tggaaagggt-ccagaggaa--GGTCTAGCCTAGGCCCC	-cacaaaactagcagcccc--...120...ttttctttccag	attggagg				
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B. Tau	gggctggc	atcagcctcact...230...-gggaagggt-ccagagaaaa--GTCCAGCCTAGGaCCCC	-acaaggctggcagcc-ccaca--...121...atttctttccag	attggagg				
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S. Sus	gggctggc	atcagcctcact...231...-gggaagggt-ccagagaaaa--GTCCAGCCTAGGCC	--ccaaggctggcagcc-ccat--...123...ttttctttccag	atcgagg				
L. Afr	gagctggg	gtcagcctcact...231...-gggaagggtcccagaagaa--GGTCCAGCCTAGG	-cccccaaggctggtagcc-cc--...128...ttttctttccag	attggaga				
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id=157382 gene=ENSG00000125817 name=CENPB segment=chr20_3764723_3765158_-1 type=A3

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P. Tro	g-GCAGaGG	GGCCTGGgGCTGGGCC	cagagtccagcgtccagct-...60...ttaaagcagcaa	gggtgcat			
P. Abe	g-GCAGaGG	GGCCTGGgGCTGGGCC	cagagtccagccatccagct-...60...ttaaagcagcaa	gggtgcat			
C. Jac	g-GCAGaGG	GGCCTGGgGCTGGGCC	cagagtccagccatccagct-...60...ttaaagcagcaa	aggtgcat			
M. Mus	-ggcagaGG	GGCCTGgGGCTGGGCC	cagagtccagccaccaggt-...60...ttaaagcagcaa	ggatgcat			
R. Nor	-ggcagaGG	GGCCTGgGGCTGGGCC	cagagtccagccatccaggt-...60...ttaaagcagcaa	ggatgcat			
C. Por	-ggcagaGG	GGCCTGGgGCTGGGCC	acagagtctggccatccagc--...61...ttaaagcagcaa	gggtgcat			
O. Cun	g-GCAGaGG	GGCCTGGgGCTGGGCC	ccagagtccagcgtccagc--...61...ttaaagcagcaa	gggtgcat			
C. Fam	gggca-GGG	GGCCTGGgGCTGGGCC	catagtccagccatccagc--...60...ttaaagcagcaa	gggtgcat			
F. Cat	gggcag-GG	TGCCTGGgGCTGGGCC	ccagagtccagccatccagc--...61...ttaaagcagcaa	gggtgcat			
B. Tau	gggca-GGG	GGCCTGGgGCTGGGCC	ccagagtccagccatccagc--...61...ttaaagcagcaa	gggtgcat			
E. Cab	gggta-GGG	GGTCTGGgGCTGGGCC	cagagtccagccaaccagca-...60...ttaaagcagcaa	gggtgcat			
S. Sus	gggcaga-G	GGCCTGGgGCTGGGCC	ccagagtccagccatccagc--...61...ttaaagcagcaa	gggtgcat			
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id=157384 gene=ENSG00000125817 name=CENPB segment=chr20_3764498_3764605_-1 type=E3 VIEW

Figure 236:



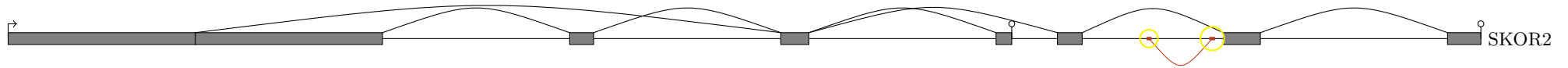
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P.Abe	cttgtcag	gctaccttttgc...37...atagcaacaagccaccagc	AGGAA	CTAGT	TGGAT	gactgcttctggagcctggat--gcagtaccattcttccactgattca	gtgagtaa		
C.Jac	cttgtcag	gctaccttttgc...37...atagcaacaagccaccagc	AGGAA	CTAGT	TGGAT	gactgcttctggagcctggat--acagtaccattcttccactgattca	gtgagtaa		
C.Por	cttgtcag	gctgtccttttgc...37...atagcaaacagccaccgtc	AGGAG	CTAGT	TGGAT	gcctg-----gcctggaccggcgcgtgccccctccactg-ctga	gtgagtaa		
O.Cun	cttgtcag	gctaccttttgc...37...atagtaacaagccaccagc	AGGAA	CTAGT	TGGAT	gactgcttctggagcctggat--gcagtaccattcttccactgattca	gtgagtaa		
C.Fam	cttgtcag	gctaccttttgc...37...atagcaacaagccaccagc	AGGAA	CTAGT	TGGAT	gactgcttctggagcctggat--gcagtaccattcttccactgattca	gtgagtaa		
F.Cat	cttgtcag	gctaccttttgc...37...atagcaacaagccaccagc	AGGAA	CTAGT	TGGAT	gactgcttctggagcctggat--gcagtaccattcttccactgattca	gtgagtaa		
B.Tau	cttgtcag	gctaccttttgc...37...atagcaacaagccaccagc	AGGAA	CTAGT	TGGAT	gactgcttctggagcctggat--gcagtaccattcttccactgattca	gtgagtaa		
E.Cab	cttgtcag	gctaccttttgc...34...atagcaacaagccaccagc	AGGAA	CTAGT	TGGAT	gactgcttctggagcctggat--gcagtaccattcttccactgattca	gtgagtaa		
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L.Afr	cttgtcag	gctaccttttgc...37...atagcaacaagccaccagc	AGGAA	CTAGT	TGGAT	gactgcttctggagcctggat--gcagtaccattcttccactgattca	gtgagtaa		
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id=817576 gene=ENSG00000168036 name=CTNNB1 segment=chr3_41265681_41265812_1 type=AN

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R.Mac	tggtcgag	gagtaacaatac...337...-aaatagacaaatagaaaatg	GTCCAATTAG	TTCCT	---ttttaatatgcttaaataa...200...ttaaattcattc	gattgtgt	
P.Tro	tggtcgag	gagtaacaatac...349...-aaatagacaaatagaaaatg	GTCCAATTAG	TTCCT	tctttttaatatgcttaaaa---...201...ttaaattcattc	gattgtgt	
P.Abe	tggtcgag	gagtaacaatac...347...-aaatagacaaatagaaaatg	GTCCAATTAG	TTCCT	---ttttaatatgcttaaataa...198...ttaaattcattc	gattgtgt	
C.Jac	tggtcgag	gagtaacaatac...326...-aaatagacaaatagaaaatg	GTCCAATTAG	TTCCT	---ttttaatatgcttaaataa...200...ttaaattcattc	aattgtgt	
C.Por	cggtcgag	gagtaagaatac...334...aaaatagacaaatag-aaatg	GTCCAATTAG	TTCCT	---ttttaatatgcttaaataa...197...ttaaattcattt	gccagtgt	
O.Cun	tggtcgag	gagtaacaatac...345...aaaatagacaaatag-aaatg	GTCCAATTAG	TTCCT	---ttttaatatgcttaaataa...200...ttaaattcattc	agtgggtgt	
C.Fam	tggtcgag	gagtaacaatac...323...aaaatagacaaatag-aaatg	GTCCAATTAG	TTCCT	---ttttaatatgcttaaataa...199...ttaaattcattc	gattgtgt	
F.Cat	tggtcgag	gagtaacaatac...335...aaaatagacaaatag-aaatg	GTCCAATTAG	TTCCT	---ttttaatatgcttaaataa...199...ttaaattcattc	gactgtgt	
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id=817621 gene=ENSG00000168036 name=CTNNB1 segment=chr3_41281310_41281934_1 type=AN VIEW

Figure 237:



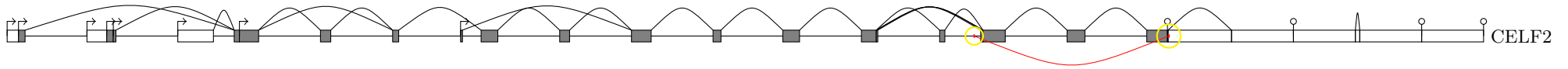
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R. Mac	ggggaaag	gtaaatgaaagt...132...	gagattaatgcatacatatc	CAATCaa	TACATGAC	actgtaatataactcttaa--...166...	tttttttattag	aagaactt
P. Abe	ggggaaag	gtaaatgaaagt...132...	gagattaatgcatacatatc	AATCaa	TACATGAC	actgtaatataactcttaa--...166...	tttttttattag	aagaactt
C. Jac	ggggaaag	gtaaatgaaagt...132...	gagattaatgcatacatatc	CAATCaa	TACATGAC	ac--taatacataactcttaaaa...165...	tttttttattag	aagaactt
M. Mus	gggaaaag	gtaagacaagt...131...	gagattaatgcatacatatc	CAATCaa	TACATGAC	actgtaatataactcttaa--...171...	ctccccattag	aggaactt
R. Nor	gggaaaag	gtaagacaatt...128...	gagattaatgcatacatatc	CAATCaa	TACATGAC	actgtaatataactcttaa--...172...	cacccccattag	aggaactt
C. Por	gggaaaag	gtaaagaaaagt...129...	gagattaatgcatacatatc	CAATCaa	TACATGAC	actgtaatataactcttaa--...169...	tttctctattag	aagaactt
O. Cun	ggggaaag	gtacagagaagc...127...	gagattaatgcatacatatc	CAATCaa	TACATGAC	actgtaatataactcttaa--...169...	tttctttattag	aagaactt
C. Fam	ggggaaag	gtaaagaaaagt...132...	gagattaatgcatacatatc	CAATCaa	TACATGAC	actgtaatataactcttaa--...170...	tttctttattag	aagaactt
B. Tau	ggggaaag	gtaaagaaaagt...132...	gagattaatgcatacatatc	CAATCaa	TACATGAC	actgtaatataactcttaa--...171...	tttctttattag	aagaactt
E. Cab	gggaaaag	gtaaagaaaagt...131...	gagattaatgcatacatatc	CAATCag	TACATGAC	actgtaatataactcttaa--...170...	tttctttattag	aagaactt
S. Sus	ggggaaag	gtaaagaaaagt...132...	gagattaatgcatacatatc	CAATCaa	TACATGAC	actgtaatataactcttaa--...169...	tttctttattag	aagaactt
L. Afr	gggaaaag	gtaaaaaaaaaa...137...	gagattaatgcatacatatc	CAATCaa	TACATGAC	actgtaatataactcttaa--...172...	tttctttattag	aagaactt
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id=240018 gene=ENSG00000215474 name=SKOR2 segment=chr18.44756929.44757305_-1 type=IN

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R. Mac	ggggaaag	gtaaatgaaagt...299...	atataacagttctctggaga	GTTAtt	TGTAaa	GATT	agt-aaaatgactcttc---t--tt---ttttattag	aagaactt
P. Abe	ggggaaag	gtaaatgaaagt...300...	atataacagttctctggaga	GTTAtt	TGTAaa	GATT	agt-aaaatgactcttc-----t--tt---ttttattag	aagaactt
C. Jac	ggggaaag	gtaaatgaaagt...298...	atataacagttctctggaga	GTTAtt	TGTAaa	GATT	agt-aaaatgactcttc---t--tt---ttttattag	aagaactt
M. Mus	gggaaaag	gtaagacaagt...299...	atataacagtcctctagaga	GTTAtt	TGTAaa	GATT	agt-aaaatggctcttcttttct---tccccattag	aggaactt
R. Nor	gggaaaag	gtaagacaatt...293...	acgtaacagttctctagagg	GTTAtt	TGTAaa	GATT	agt-aaaatgcctcttcttctccccaccaccattag	aggaactt
C. Por	gggaaaag	gtaaagaaaagt...296...	atataacagttctctagaga	GTTAtt	TGTAaa	GATT	agt-aaaatgactcttctttt--tt---tctctattag	aagaactt
O. Cun	ggggaaag	gtacagagaagc...295...	atataacagttctctggaga	GTTAtt	TGTAaa	GATT	agt-aaaatgactcttctt--tt--tt---tctttattag	aagaactt
C. Fam	ggggaaag	gtaaagaaaagt...300...	atataacagtcctctggaga	GTTAtt	TGTAaa	GATT	agt-aaaatgactcttctgtt--tt---tctttattag	aagaactt
B. Tau	ggggaaag	gtaaagaaaagt...300...	atataacagttctctggaga	GTTAtt	TGTAaa	GATT	agtaaaaatgactcttctttt--tt---tctttattag	aagaactt
E. Cab	gggaaaag	gtaaagaaaagt...299...	atataacagttctctggaga	GTTAtt	TGTAaa	GATT	agt-aaaatgactcttctttt--tt---tctttattag	aagaactt
S. Sus	ggggaaag	gtaaagaaaagt...300...	atataacagttctctggaga	GTTAtt	TGTAaa	GATT	agt-aaaatgactcttc-ttt--tt---tctttattag	aagaactt
L. Afr	gggaaaag	gtaaaaaaaaaa...305...	atataacagttctctggaga	GTTAtt	TGTAaa	GATT	agt-aaaatgactcttcttttctt--tctttattag	aagaactt
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id=240018 gene=ENSG00000215474 name=SKOR2 segment=chr18.44756929.44757305_-1 type=IN VIEW

Figure 238:



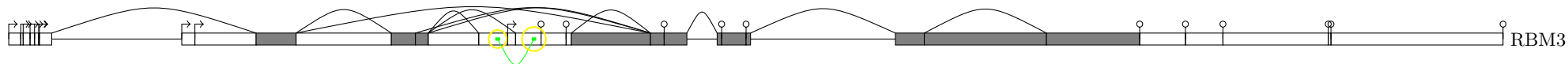
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P. Tro	taacaacg	gtacttgccagt-...191...	tgtgt-ttaaatgattctcta	ACTTCCTT	GGAAAGC	actaatgaataagtgctgtttctcttctcta-ttggtggggtttttgtaaag	ttgctcaa
P. Abe	taacaacg	gtacttgccagt-...191...	tgtgt-ttaaatgattctcta	ACTTCCTT	GGAAAGC	actaatgaataagtgctgtttctcttctcta-ttggtggggtttttgtaaag	ttgctcaa
C. Jac	taacagtg	gtacttgccagt-...191...	-ttgtgtcaaatgattctcta	ACTTCCTT	GGAAAGC	actaatgaataagtgctgtttctcttctcta-ttggtggggtttttgtaaag	ttgctcaa
M. Mus	tcccggtg	gtacttgccagc-...197...	actgtgtcaaatgattctct	GACTTCCTT	GGAAAGC	actaatgaataagtgctatttctcttctcta-ttggtggggtttttgtaaag	ttgctcaa
R. Nor	tcccagtg	gtg-ttaccagca...185...	tgtactgtcaaatgattctct	GACTTCCTT	GGAAAGC	actaatgagtaagtgctatttctcttctcta-ttggtggggtttttgtaaag	ttgctcaa
C. Por	taacagtg	gtacttgccagt-...192...	-ttgtgtcaaatgattctcta	ACTTCCTT	GGAAAGC	actaatgaataagtgctatttctcttctcta-ttggtggggtttttgtaaag	ttgctcaa
O. Cun	taacagca	gtacttgccagt-...196...	-ttgtgtcaaatgattctcta	ACTTCCTT	GGAAAGC	actaatgaataagtgctatttctcttctcta-ttggtggggtttttgtaaag	ttgctcaa
C. Fam	agacagcc	gtacttgccagt-...234...	-ttgtgtcaaatgattctcta	ACTTCCTT	GGAAAGC	actaatgaa-aagtgctatttctcttctcta-ttggtggggtttttgtaaag	ttgctcaa
F. Cat	agatagcg	ggacttgccagt-...210...	-gtgtgtcaaatgattctcta	ACTTCCTT	GGAAAGC	actaatgaa-aagtgctgtttctcttctcta-ttggtggggtttttgtaaag	ttgctcaa
B. Tau	gagcccca	gt-cttgccagta...209...	cttgtgtcaaatgattctct	GACTTCCTT	GGAAAGC	actaatgaa-aagtgctgtttctcttctcta-ttggtggggtttttgtaaag	ttgctcaa
E. Cab	taacaaca	gtacttgccagt-...212...	-ttgtgtcaaatgattctcta	ACTTCCTT	GGAAAGC	actaatgaa-aagtgctatttctcttctcta-ttggtggggtttttgtaaag	ttgctcaa
O. Avi	gagcccca	gt-cttgccagta...209...	cttgtgtcaaatgattctct	GACTTCCTT	GGAAAGC	actaatgaa-aagtgctgtttctcttctcta-ttggtggggtttttgtaaag	ttgctcaa
L. Afr	tagcaaca	gtacttgccagt-...214...	-ttgtgtcaaatgattctcta	ACTTCCTT	GGAAAGC	actaatgaataagtgctatttctcttctcta-ttggtggggtttttgtaaag	ttgctcaa
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id=7793 gene=ENSG00000048740 name=CELF2 segment=chr10_11362862_11363151.1 type=IN

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P. Tro	taGCTTTC	TtAGGGtAAGTcc
P. Abe	taGCTTTC	TtAGGGtAAGTcc
C. Jac	taGCTTTC	TtAGGGtAAGTcc
M. Mus	taGCTTTC	TtAGGGtAAGTcc
R. Nor	taGCTTTC	TtAGGGtAAGTcc
C. Por	taGCTTTC	TtAGGGtAAGTcc
O. Cun	taGCTTTC	TtAGGGtAAGTcc
C. Fam	taGCTTTC	TtAGGGtAAGTcc
F. Cat	taGCTTTC	TtAGGGtAAGTcc
B. Tau	taGCTTTC	TtAGGGtAAGTcc
E. Cab	taGCTTTC	TtAGGGtAAGTcc
O. Avi	taGCTTTC	TtAGGGtAAGTcc
L. Afr	taGCTTTC	TtAGGGtAAGTcc
	*****	*****

id=7800 gene=ENSG00000048740 name=CELF2 segment=chr10_11371056_11371060.1 type=E3 VIEW

Figure 239: CS=4.2



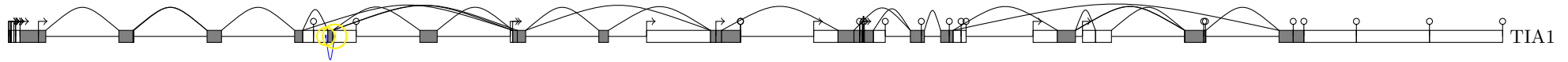
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P.Tro	tgttctag	ggggtggagggcagcggcagacagagcctggccgcc	TGGGAGGCg	ACGAct	GGTCCT	gcatgaggccgagaagccacctgtgga	tggttgac
C.Jac	tgttctag	ggggtggagggcagcggcagacagagcctggccgcc	TGGGAGGCg	ACGAct	GGTCCT	gcatgaggccgagaagccacctgtgga	tggttgac
M.Mus	tgttctag	ggggtggagggcagcggcagacagagcctggccgcc	TGGGAGGCg	ACGAct	GGTCCT	gcatgaggccgagaagccacctgtgga	tggttgac
R.Nor	tgttctag	ggggtggagggcagcggcagacagagcctggccgcc	TGGGAGGCg	ACGAct	GGTCCT	gcatgaggccgagaagccacctgtgga	tggttgac
C.Por	tgttctag	ggggtggagggcagcggcagacagagcctggccgcc	TGGGAGGCg	ACGAct	GGTCCT	gcatgaggccgagaagccacctgtgga	tggttgac
O.Cun	tgttctag	ggggtggagggcagcggcagacagagcctggccgcc	TGGGAGGCg	ACGAct	GGTCCT	gcatgaggccgagaagccacctgtgga	tggttgac
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F.Cat	tgttctag	ggggtggagggcagcggcagacagagcctggccgcc	TGGGAGGCg	ACGAct	GGTCCT	gcatgaggccgagaagccacctgtgga	tggttgac
B.Tau	tgttctag	ggggtggagggcagcggcagacagagcctggccgcc	TGGGAGGCg	ACGAct	GGTCCT	gcatgaggccgagaagccacctgtgga	tggttgac
E.Cab	tgttctag	ggggtggagggcagcggcagacagagcctggccgcc	TGGGAGGCg	ACGAct	GGTCCT	gcatgaggccgagaagccacctgtgga	tggttgac
L.Afr	tgttctag	ggggtggagggcagcggcagacagagcctggccgcc	TGGGAGGCg	ACGAct	GGTCCT	gcatgaggccgagaagccacctgtgga	tggttgac
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id=815166 gene=ENSG00000102317 name=RBM3 segment=chrX_48434203_48434286.1 type=AN

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P.Tro	gggcttag	gtagtagagtctgcagacctgtggccctggc	-----c	cgagag	AGGACCTCGTga	GTCTTCTG	acatggactctgaagcc	tcaaacca
C.Jac	gggcttag	gtagtagagtctgcagacctgtggccctggc	-----c	cgagag	AGGACCTCGTga	GTCTTCTG	acatggactctgaagcc	tcaaacca
M.Mus	gggcttag	gtagtagagtctgcagacctgtggccctggc	-----c	cgagag	AGGACCTCGTga	GTCTTCTG	acatggactctgaagcc	tcaaacca
R.Nor	gggcttag	gtagtagagtctgcagacctgtggccctggc	-----c	cgagag	AGGACCTCGTga	GTCTTCTG	acatggactctgaagcc	tcaaacca
C.Por	gggcttag	gtagtagagtctgcagacctgtggccctggc	-----c	cgagag	AGGACCTCGTga	GTCTTCTG	acatggactctgaagcc	tcaaacca
O.Cun	gggcttag	gtagtagagtctgcagacctgtggccctggc	-----c	cgagag	AGGACCTCGTga	GTCTTCTG	acatggactctgaagcc	tcaaacca
C.Fam	gggcttag	gtagtagagtctgcagacctgtggccctggc	-----c	cgagag	AGGACCTCGTga	GTCTTCTG	acatggactctgaagcc	tcaaacca
F.Cat	gggcttag	gtagtagagtctgcagacctgtggccctggc	-----c	cgagag	AGGACCTCGTga	GTCTTCTG	acatggactctgaagcc	tcaaacca
B.Tau	gggcttag	gtagtagagtctgcagacctgtggccctggc	-----c	cgagag	AGGACCTCGTga	GTCTTCTG	acatggactctgaagcc	tcaaacca
E.Cab	gggcttag	gtagtagagtctgcagacctgtggccctggc	-----c	cgagag	AGGACCTCGTga	GTCTTCTG	acatggactctgaagcc	tcaaacca
L.Afr	gggcttag	gtagtagagtctgcagacctgtggccctggc	-----c	cgagag	AGGACCTCGTga	GTCTTCTG	acatggactctgaagcc	tcaaacca
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Figure 240:



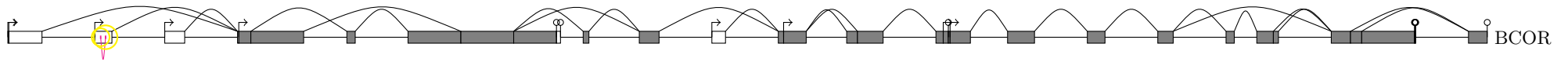
H.Sap	ataaacat	catacatgtttg...39...gtgtttgtgtaataaaatt	AAGAACAAATCT	aatccttgtcatcag	gtagtacc
R.Mac	ataaacat	catacatgtttg...39...gtgtttgtgtaataaaatt	AAGAACAAATCT	aatccttgtcatcag	gtagtacc
P.Tro	ataaacat	catacatgtttg...39...gtgtttgtgtaataaaatt	AAGAACAAATCT	aatccttgtcatcag	gtagtacc
P.Abe	ataaacat	catacatgtttg...39...gtgtttgtgtaataaaatt	AAGAACAAATCT	aatccttgtcatcag	gtagtacc
C.Jac	ataaacat	catacatgtttg...39...gtgtttgtgtaataaaatt	AAGAACAAATCT	aatccttgtcatcag	gtagtacc
M.Mus	tataacat	catacatgtttg...37...gtgtttgtgtaataaaatt	AAGAACAAATCT	aatccttgtcatcag	gtagtacc
R.Nor	ataataca	catacatgtttg...37...gtgtttgtgtaataaaatt	AAGAACAAATCT	aatccttgtcatcag	gtagtacc
C.Por	ataaacat	catacatgtttg...39...gtgtttgtgtaataaaatt	AAGAACAAATCT	aatccttgtcatcag	gtagtacc
O.Cun	ataaacat	catacatgtttg...39...gtgtttgtgtaataaaatt	AAGAACAAATCT	aatccttgtcatcag	gtagtacc
C.Fam	ataaacat	catacatgtttg...39...gtgtttgtgtaataaaatt	AAGAACAAATCT	aatccttgtcatcag	gtagtacc
B.Tau	ataaacat	catgcatgttgca...37...gtgtttgtgtaataaaatt	AAGAACAAATCT	aatccttgtcatcag	gtagtacc
E.Cab	ataaacat	catacatgtttg...39...gtgtttgtgtaataaaatt	AAGAACAAATCT	aatccttgtcatcag	gtagtacc
S.Sus	ataaacat	catacatgttgca...37...gtgtttgtgtaataaaatt	AAGAACAAATCT	aatccttgtcatcag	gtagtacc
O.Avi	ataaacat	catgcatgttgca...37...gtgtttgtgtaataaaatt	AAGAACAAATCT	aatccttgtcatcag	gtagtacc
L.Afr	ataaacat	cgtatgtatttg...39...gtgtttgtgtaataaaatt	AAGAACAAATCT	aatccttgtcatcag	gtagtacc
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S.Sus	ttcacaAG	GTaaTTGTaTCTT	cttaaacat-aaaatgaaatc...119...gtgttgaccaag	tgtggcct
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Figure 241:



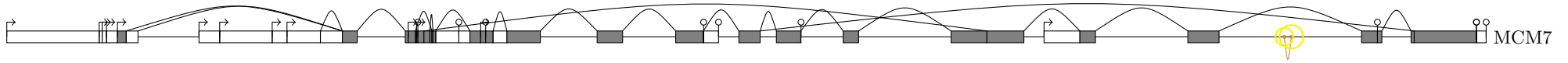
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O. Cun	ttccgcaa	tccattcatgca...50...tgtgggagcagagcctccac	TCTGgCGAGaGATAAaTGGC	ctctgacagcccctcctcgc...28...ggcggctctcag	gtctgtgc
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Figure 242:



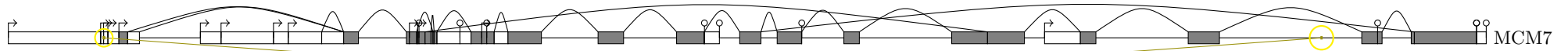
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Figure 243: CS=9



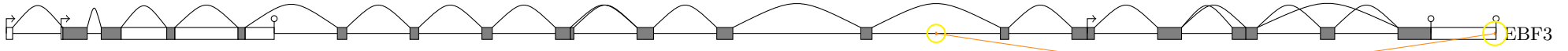
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P.Abe	gggaggcg	acGTTTCgCGCCaaTT	TCGGTTGg
C.Jac	tggggcg	acGTTTCgCGCCaaTT	TCGGTTGg
M.Mus	gggtgacg	acGTTTCgCGCCaaTT	TCGGTTGg
R.Nor	gggtgacg	acGTTTCgCGCCaaTT	TCGGTTGg
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Figure 244: CS=4.2



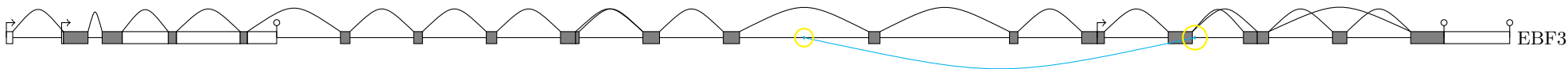
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C.Jac	ttttctca	t	ttttcacatt...2347...	tgttcattttacacaatatt	TAAT	taAAGTATTCTTGCT	gtgaatttc	acttttgg
M.Mus	tcttctca	t	ctttcacatt...2360...	tgttcattttacacaatatt	TAAT	taAAGTATTCTTGCT	gtgaatttc	acttttgg
R.Nor	ttttctca	t	ctttcacatt...2356...	tgttcattttacacaatatt	TAAT	taAAGTATTCTTGCT	gtgaatttc	acttttgg
C.Por	ttttctca	t	ttttcacatt...2340...	tgttcattttacacaatatt	TAAT	taAAGTATTCTTGCT	gtgaatttc	acttttgg
O.Cun	ttttctca	t	ttttcacatt...2331...	tgttcattttacacaatatt	TAAT	taAAGTATTCTTGCT	gtgaatttc	acttttgg
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O.Avi	ttttctca	t	ttttcacatt...2304...	tgttcattttacacgatatt	TAAT	taAAGTATTCTTGCT	gtgaatttc	acttttgg
L.Afr	ttttctca	t	ttttcacatt...2358...	tgttcattttacacaatatt	TAAT	taAAGTATTCTTGCT	gtgaatttc	acttttgg
* ***** * ***** ***** ** ** * ***** ** ** * ***** *								

id=751979 gene=ENSG00000108001 name=EBF3 segment=chr10_131633547_131635963_-1 type=E3 VIEW

Figure 245: CS=11.7



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C.Jac	ctacaccg	gtgagttcatgg...4526...-----	tgtgctcaggcaaatatgcta	GACAAAAAAGGAC	cacagggataaatctgaggc...386...	gtcctgttgag	cccttaat
M.Mus	ctacactg	gtgagttggcgg...4524...-----	tgtgctcaggcaaatatgcta	GACAAAAAAGGAC	cacagggataaatctgaggc...388...	tccctgttgag	cccttaat
R.Nor	ctacactg	gtgagtacgtag...4519...-----	tgtgctcaggcaaatatgcta	GACAAAAAAGGAC	cacagggataaatctgaggc...393...	tccctgttgag	cccttaat
C.Por	ctacaccg	gtgagtgcacgt...4526...-----	tgtgctcaggcaaatatgcta	GACAAAAAAGGAC	cacagggataaatctgaggc...386...	gtcctgttgag	cccttaac
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L.Afr	gtacactg	gtgagttcgatc...4525...ccggtt	tgtgctcaggcaat	ATGCTGACAAAAAAGGAC	cacagggataaatctgaggc...381...	gtcctgttgag	cccttaat

***** * ***** ** ***** * ***** ** ***** ***** ** ** ** * *****

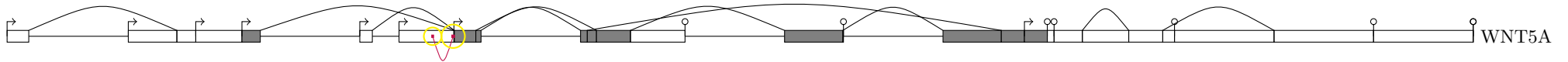
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P.Abe	ctacggca	gtaagt	GTCTgTTTTGTC	acacgtcatcacgagattc-----	...350...	gctttgttgag	tagtgccg
C.Jac	ctacggca	gtaagt	GTCTgTTTTGTC	acacgtcatcacgagattc-----	...358...	gctttgttgag	tagtgccg
M.Mus	ctacggca	gtaagt	GTCTgTTTTGTC	acacgtcatcacgagattc-----	...353...	gctttgttgag	tagtgccg
R.Nor	ctacggca	gtaagt	GTCTgTTTTGTC	acacgtcatcacgagattc-----	...355...	gctttgttgag	tagtgccg
C.Por	ctacggca	gtaagt	GTCTgTTTTGTC	acacgtcatcacgagattc-----	...353...	gctttgttgag	tagtgccg
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S.Sus	ctacggca	gtaagt	GTCTgTTTTGTC	acacgtcatcaccagattc-----	...341...	gctttgttgag	tagtgccg
O.Avi	ctacggca	gtaagt	GTCTgTTTTGTC	acacgtcatcacagattc-----	...342...	gctttgttacag	tagtgccg
L.Afr	ctacggca	gtaagt	GTCTgTTTTGTCacCGT	catcacgagattcatattc...	...335...	gctttgttgag	tagtgccg

***** ***** ***** ***** ***** ***** ***** ***** *****

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Figure 246: CS=8.4



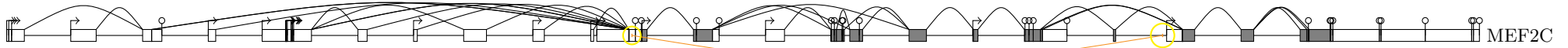
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R. Mac	gcctggca	ccagggtttga...122...-cttgccatcaaaaaactc-ac	GGAGGaGAAGcGCAGt	caatcaacagtaaaacttaa...75...tcttcctctcc	agaagtcc
P. Tro	gcctggca	ccagggtttga...122...-cttgccatcaaaaaactc-ac	GGAGGaGAAGcGCAGt	caatcaacagtaaaacttaa...75...tcttcctctcc	agaagtcc
P. Abe	gcctggca	ccagggtttga...122...-cttgccatcaaaaaactc-ac	GGAGGaGAAGcGCAGt	caatcaacagtaaaacttaa...75...tcttcctctcc	agaagtcc
C. Jac	gcctggca	ccagggtttga...121...tcttgccatc-aaaaactc-ac	GGAGGaGAAGcGCAGt	caatcaacagtaaaacttaa...75...tcttcctctcc	agaagtcc
M. Mus	acctggta	ccggggtttga...122...-cttgccatcaaaaaactc-ac	GGAGGaGAAGcGCAGt	caatcaacagtaaaacttaa...74...tcttcctctcc	agaagccc
R. Nor	gcctggta	ccggggtttga...123...-cttgccatcagaaaactc-ac	GGAGGaGAAGcGCAGt	caatcaacagtaaaacttaa...74...tcttcctctcc	agaagccc
C. Por	gcctggca	ccggggtttga...122...-cttgccatcaaaaagctc-ac	GGAGGaGAAGcGCAGt	caat-gacagtaaaacttaag...83...tcttcctctcc	agaagtcc
C. Fam	gcttggca	ccggggtttgg...123...--ttgccatcaaaaaactcaac	GGAGGaGAAGcGCAGt	caatcaacagtaaaacttaa...75...tcttcctctcc	agaagtcc
F. Cat	gcttggca	ccggggtttga...122...-cttgccatcaaaaaactc-ac	GGAGGaGAAGcGCAGt	caatcaacagtaaaacttaa...75...tcttcctctcc	agaagcgc
B. Tau	gcctggca	ccggggtttga...121...tcttgccatc-aaaaactc-ac	GGAGGaGAAGcGCAGt	caatcaacagtaaaacttga...75...tcttcctctcc	agaagtcc
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L. Afr	gcctggca	ccggggtttga...122...-cttgccatcaaaaaactc-ac	GGAGGaGAAGcGCAGt	caatcaacagtaaaacttaag...73...tcttcctctcc	agaagtcc
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id=295984 gene=ENSG0000114251 name=WNT5A segment=chr3_55514949_55515224_-1 type=AN

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P. Tro	gcctggca	ccagggtttga...223...-atctgagaggcaataaacat	CTGctc	CTTTCTCCCTCTcc	agaagtcc
P. Abe	gcctggca	ccagggtttga...223...-atctgagaggcaataaacat	CTGctc	CTTTCTCCCTCTcc	agaagtcc
C. Jac	gcctggca	ccagggtttga...222...-atctgagaggcaataaacat	CTGctc	CTTTCTCCCTCTcc	agaagtcc
M. Mus	acctggta	ccggggtttga...222...tatctga-aggcaataaacat	CTGctc	CTTTCTCCCTCTcc	agaagccc
R. Nor	gcctggta	ccggggtttga...223...tatctga-aggcaataaacat	CTGctc	CTTTCTCCCTCTcc	agaagccc
C. Por	gcctggca	ccggggtttga...231...-atcggagaggcaataaacat	CTGctc	CTTTCTCCCTCTcc	agaagtcc
C. Fam	gcttggca	ccggggtttgg...224...-atctgagaggcaataaacat	CTGctc	CTTTCTCCCTCTcc	agaagtcc
F. Cat	gcttggca	ccggggtttga...223...-atctgagaggcaataaacat	CTGctc	CTTTCTCCCTCTcc	agaagcgc
B. Tau	gcctggca	ccggggtttga...222...-atctgagaggcaataaacat	CTGctc	CTTTCTCCCTCTcc	agaagtcc
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O. Avi	gcctggca	ccggggtttga...223...-atctgagaggcaataaacat	CTGctc	CTTTCTCCCTCTcc	agaagtcc
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id=295984 gene=ENSG0000114251 name=WNT5A segment=chr3_55514949_55515224_-1 type=AN VIEW

Figure 247:



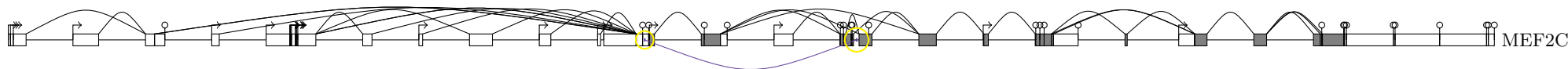
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P.Tro	ttcag	cag	gaacgaatgcaggaa	TTTGGGAACTGAGCTG	tgcaagtgctgaagaaggagattt	gttggaggaaa	caggaaag								
P.Abe	ttcag	cag	gaacgaatgcaggaa	TTTGGGAACTGAGCTG	tgcaagtgctgaagaaggagattt	gttggaggaaa	caggaaag								
C.Jac	ttcag	cag	gaacgaatgcaggaa	TTTGGGAACTGAGCTG	tgcaagtgctgaagaaggagattt	gtctggaggaaa	caggaaag								
M.Mus	ttcag	cag	gaacgaatgcaggaa	TTTGGGAACTGAGCTG	tgccgctgctgaagaaggaaacgt	gttgaaggaaa	caggaaag								
C.Por	tccag	cag	gaacgaatgcaggaa	TTTGGGAACTGAGCTG	tgcaagtgctgaagaaggaa	catttgttgaaggaaa	caggaaag								
O.Cun	ttcag	cag	gaacgaatgcaggaa	CTTGGGAACTGAGC	ggtgcaagtgt	aaagaaggccattt	gttgaaggaaa								
C.Fam	tccag	cag	gaacgaatgcaggaa	TTTGGGAACTGAGCAGT	GCAAGTCTG	aagaaggagattt	gttggaggaaa								
B.Tau	ttcag	cag	gaacgaatgcaggaa	TTTGGGAACTGAGC	agcgcgaagtgt	gaaaaaggagattt	gttggaggaaa								
E.Cab	ttcag	cag	gaacgaatgcaggaa	TTTGGGAACTGAGC	ccgcgaagtgt	gaagaaggagattt	gttggaggaaa								
S.Sus	ttcag	cag	gaacgaatgcaggaa	TTTGGGAACTGAGC	agtgcgaagtgt	gaagaaggaaattt	gttggaggaaa								
O.Avi	ttcag	cag	gaacgaatgcaggaa	TTTGGGAACTGAGC	agcgcgaagtgt	gaagaaggagattt	gttggaggaaa								
L.Afr	ttag	cag	gaacgaatgcaggaa	CTTGGGAACTGAGCTG	tgcaagtgctgaagaaggagattt	gttggaggaaa	caggaaag								
	*	**	***	*****	*	*****	**	****	**	****	***	*	*****	***	***

id=570555 gene=ENSG0000081189 name=MEF2C segment=chr5_88119678_88119744_-1 type=EN

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C.Jac	tgcttttg	gtaagtgggtgag...	.584...	-aaagctatggtacttgttac-----	TAGTTCAGTTgCCTAGG	agatactgatgtaatgggttactatggcaacagctggtctct	tgaaggat
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L.Afr	tgcttttg	gtaagtggcgag...	.618...	-taaagctatggtactt-ttac-----	TAGTTCAGTTgCCTAGG	agatactgatgtaatgggttactatggcaacaactggtctct	tgaaggat
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Figure 249: CS=3.9



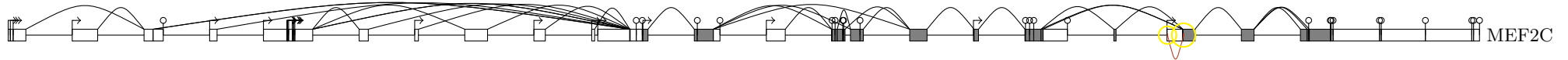
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P.Abe	ggaggaaa	caggaAAGAGaAAGAAAAGGAAGG	aaaaatacataatttcagggacgagagagagaagaaaaac	ggggacta
C.Jac	ggaggaaa	caggaAAGAGaAAGAAAAGGAAGG	aaaaatacataatttcaggaacgagagagagaagaaaaac	ggggacta
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C.Por	gaaggaaa	cagggAAGAGaAAGAAAAGGAAGG	aaaaatacataatttcaggaacgagagagagaagaaaaac	ggggacta
O.Cun	gaaggaaa	caggaAAGAGaAAGAAAAGGAAGG	aaaaatacataatttcagggacgagagagagaagaaaaac	ggggacta
C.Fam	ggaggaaa	aaggaAAGAGaAAGAAAAGGAAGG	aaaaatacataatttcagggacgagagagagaagaaaaac	ggggacta
B.Tau	ggaggaaa	caggaAAGAGaAAGAAAAGGAAGG	aaaaatacataatttcagggacgagagagagaagaagac	ggggacta
E.Cab	ggaggaaa	caggaAAGAGaAAGAAAAGGAAGG	aaaaatacataatttcagggacgagagagagaagaaaaac	ggggacta
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O.Avi	ggaggaaa	caggaAAGAGaAAGAAAAGGAAGG	aaaaatacataatttcagggacgagagagagaagaagac	ggggacta
L.Afr	ggaggaaa	caggaAAGAGaAAGAAAAGGAAGG	aaaaatacataatttcagggacgagagagagaagaaaaac	ggggacta
	* *****	*** *****	***** **	*****

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P.Tro	gattgtgt	gtaagtactcagaacacCCTTCa--TTTTTTT	aCTCTTgatatttctctgaacctggcag	gcattgaa
P.Abe	gattgtgt	gtaagtactcagaacacCCTTCa--TTTTTTT	aCTCTTgatatttctctgaacctggcag	gcattgaa
C.Jac	gattgtgt	gtaagtactcgaacacCCTTCa--TTTTTTT	aCTCTTgatatttctctgaacctggcag	gcattgaa
M.Mus	gattgtgt	gtaagtactcgaacacCCTTCaTTTTTTTT	aCTCTTgatatttctctgaacctggcag	gcattgaa
C.Por	gattgtgt	gtaagtactcgaacacCCTTCC--TTTTTTT	aCTCTTgatatttctctgaacctggcag	gcattgaa
O.Cun	gattgtgt	gtaagtactcgaacacCCTTCC--TTTtTTTTT	aCTCTcgatatttctctgaacctggcag	gccttgaa
C.Fam	gattgtgt	gtaagtactcgaacacCCTTCa--TTTTTTT	aCTCTTgatatttctctgaacctggcag	gccttgaa
B.Tau	gattgtgt	gtaagtactcaaacacCCTTCa--TTTTTTT	aCTCTTgatatttctctgaacctggcag	gccttgaa
E.Cab	gattgtgt	gtaagtactcgaacacCCTTCa--TTTTTTT	aCTCTTgatatttctctgaacctggcag	gccttgaa
S.Sus	gattgtgt	gtaagtactcaaacacCCTTCC--TTTTTTT	aCTCTTgatatttctctgaacctggcag	gccttgaa
O.Avi	gattgtgt	gtaagtactcaaacacCCTTCa--TTTTTTT	aCTCTTgatatttctctgaacctggcag	gccttgaa
L.Afr	gattgtgt	gtaagtactcagcacacCCTTCg--TTTTTTT	aCTCTTgatatttctctgaacctggcag	gcattgaa
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Figure 250:



```

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C.Jac tGGTcTCTTGAAGgattgtaaatgatagggtg...134...atttactttaaaagaatcaa
M.Mus tGGTcTCTTGAAGgattgtaaatgatagggtg...134...atttactttaaaagaatcaa
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C.Fam tGGTcTCTTGAAGgattgtaaatgatagggtg...132...atttactttaaaagaatcaa
B.Tau tGGTcTCTTGAAGgattgtaaatgatagggtg...134...atttactttaaaagaatcaa
E.Cab tGGTcTCTTGAAGgattgtaaatgatagggtg...134...atttactttaaaagaatcaa
S.Sus tGGTcTCTTGAAGgattgtaaatgatagggtg...128...atttactttaaaagaatcaa
O.Avi tGGTcTCTTGAAGgattgtaaatgatagggtg...134...atttactttaaaagaatcaa
L.Afr tGGTcTCTTGAAGgattgtaaatgatagggtg...135...atttactttaaaagaatcaa
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***

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id=570590 gene=ENSG0000081189 name=MEF2C segment=chr5_88025167_88025336_-1 type=AN

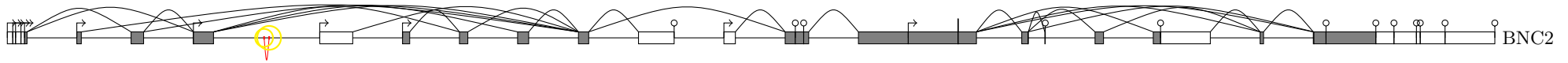
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R.Mac tggctcttgaaggattgta...132...cagtaatgtc-tttttatttaCTTTaaAAGAATCAa
P.Tro tggctcttgaaggattgta...131...cagtaatgtc-tttttatttaCTTTaaAAGAATCAa
P.Abe tggctcttgaaggattgta...131...cagtaatgtc-tttttatttaCTTTaaAAGAATCAa
C.Jac tggctcttgaaggattgta...132...caataatgtc-tttttatttaCTTTaaAAGAATCAa
M.Mus tggctcttgaaggattgta...132...caataatgtc-tttttatttaCTTTaaAAGAATCAa
C.Por tggctcttgaaggattgta...132...-atcaatgctgtctttttttaCTTTaaAAGAATCAa
O.Cun tggctcttgaaggattgta...129...caataatgtc-tttttatttaCTTTaaAAGAATCAa
C.Fam tggctcttgaaggattgta...130...caataatgtc-tctttatttaCTTTaaAAGAATCAa
B.Tau tggctcttgaaggattgta...132...ccataatgtc-tttttatttaCTTTaaAAGAATCAa
E.Cab tggctcttgaaggattgta...132...cagtaatgtc-tttttatttaCTTTaaAAGAATCAa
S.Sus tggctcttgaaggattgta...126...cagtaatgtc-tttttatttaCTTTaaAAGAATCAa
O.Avi tggctcttgaaggattgta...132...ccataatgtc-tttttatttaCTTTaaAAGAATCAa
L.Afr tggctcttgaaggattgta...133...-aataatgctctttttatttgCTTTaaAAGAATCAa
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id=570590 gene=ENSG0000081189 name=MEF2C segment=chr5_88025167_88025336_-1 type=AN VIEW

Figure 252:



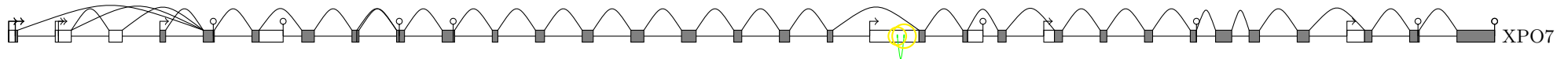
H. Sap	cccaacag	gtaagttacttt...4793...	cattcctttcaggttaaact	AGGGAATG	CATTGTG	ttaaattccaagtcgcatg...115...	ggaaaatTTTAC	ccactagc
R. Mac	cccaacag	gtaagtttcttt...4793...	cattcctttcaggttaaact	AGGGAATG	CATTGTG	ttaaattccaagtcgcatg...115...	ggaaaatTTTAC	ccactagc
P. Tro	cccaacag	gtaagttacttt...4793...	cattcctttcaggttaaact	AGGGAATG	CATTGTG	ttaaattccaagtcgcatg...115...	ggaaaatTTTAC	ccactagc
P. Abe	cccaacag	gtaagttacttt...4793...	cattcctttcaggttaaact	AGGGAATG	CATTGTG	ttaaattccaagtcgcatg...115...	ggaaaatTTTAC	ccactagc
C. Jac	cccaacag	gtaagttactta...4793...	cattcctttcaggttaaact	AGGGAATG	CATTGTG	ttaaattccaagtcgcatg...115...	ggaaaatTTTAC	ccactagc
M. Mus	cccaacag	gtaagttacttt...4795...	cattcctttcaggttaaact	AGGGAATG	CATTGTG	ttaaattccaagtcgcatg...113...	ggaaaatTTTAC	ccatcagc
R. Nor	cccaacag	gtaagttacttt...4794...	cattcctttcaggttaaact	AGGGAATG	CATTGTG	ttaaattccaagtcgcatg...114...	ggaaaatTTTAC	ccatcagc
C. Por	cccaacag	gtaagttacttt...4795...	cattcctttcaggttaaact	AGGGAATG	CATTGTG	ttaaattccaagtcgcatg...113...	ggaaaatTTTAC	ccaccagc
O. Cun	cccaacag	gtaagttacttt...4816...	cattcctttcaggttaaact	AGGGAATG	CATTGTG	ttaaattccaagtcgcatg...92...	ggaaaatTTTAC	ccaccagc
C. Fam	cccaacag	gtaagttacttt...4799...	cattcctttcaggttaaact	AGGGAATG	CATTGTG	ttaaattccaagtcgcatg...109...	ggaaaatTTTAC	ccaccagt
B. Tau	cccaacag	gtaagttacttt...4790...	cattcctttcaggttaaact	AGGGAATG	CATTGTG	ttaaattccaagtcgcatg...118...	ggaaaatTTTAC	ccaccagc
S. Sus	cccaacag	gtaagttacttt...4796...	cattcctttcaggttaaact	AGGGAATG	CATTGTG	ttaaattccaagtcgcatg...112...	ggaaaatTTTAC	ccaccagc
L. Afr	cccaacag	gtaagttacttt...4794...	cattcctttcaggttaaact	AGGGAATG	CATTGTG	ttaaattccaagtcgcatg...114...	ggaaaatTTTAC	ccaccagc
	*****	***** **		*****	*****		*****	*** **

id=325101 gene=ENSG00000173068 name=BNC2 segment=chr9_16705081_16727794_-1 type=IN

H. Sap	cccaacag	gtaagttacttt...4843...	tgcgatgaatgtttattgc	CAC-AGTGCATT	agCCCT	ccaggggagtggtgtggcg...64...	ggaaaatTTTAC	ccactagc
R. Mac	cccaacag	gtaagtttcttt...4843...	tgcgatgaatgtttattgc	CAC-AGTGCATT	agCCCT	ccaggggagtggtgtggcg...64...	ggaaaatTTTAC	ccactagc
P. Tro	cccaacag	gtaagttacttt...4843...	tgcgatgaatgtttattgc	CAC-AGTGCATT	agCCCT	ccaggggagtggtgtggcg...64...	ggaaaatTTTAC	ccactagc
P. Abe	cccaacag	gtaagttacttt...4843...	tgcgatgaatgtttattgc	CAC-AGTGCATT	agCCCT	ccaggggagtggtgtggcg...64...	ggaaaatTTTAC	ccactagc
C. Jac	cccaacag	gtaagttactta...4843...	tgcgatgaatgtttattgc	CAC-AGTGCATT	agCCCT	ccaggggagtggtgtggcg...64...	ggaaaatTTTAC	ccactagc
M. Mus	cccaacag	gtaagttacttt...4845...	tgcgatgaatgtttattgc	CAC-AGTGCATT	agCCCT	ccaggggagtggtgtggca...62...	ggaaaatTTTAC	ccatcagc
R. Nor	cccaacag	gtaagttacttt...4844...	tcccatgaatgtttattgc	CAC-AGTGCATT	agCCCT	ccaggggagtggtgtggcg...63...	ggaaaatTTTAC	ccatcagc
C. Por	cccaacag	gtaagttacttt...4845...	tgcgatgaatgtttattgc	CAC-AGTGCATT	agCCCT	ccaggggagtggtgtggct...62...	ggaaaatTTTAC	ccaccagc
O. Cun	cccaacag	gtaagttacttt...4866...	tgcgatgaatgtttattgc	CAC-AGTGCATT	agCCCT	ccaggggagtggtgtggcg...41...	ggaaaatTTTAC	ccaccagc
C. Fam	cccaacag	gtaagttacttt...4849...	tgcgatgaatgtttattgc	CAC-AGTGCATT	agCCCT	ctaggggagtggtgtggcg...58...	ggaaaatTTTAC	ccaccagt
B. Tau	cccaacag	gtaagttacttt...4840...	tgcgatgaatgtttattgc	CAC-AGTGCATT	agCCCT	ctaggggagtggtgtggcg...67...	ggaaaatTTTAC	ccaccagc
S. Sus	cccaacag	gtaagttacttt...4846...	tgcgatgaatgtttattgc	CAC-AGTGCATT	agCCCT	ctaggggagtggtgtggcg...61...	ggaaaatTTTAC	ccaccagc
L. Afr	cccaacag	gtaagttacttt...4844...	tgcgatgaatgtttattgc	CACaGTGCATT	agCCCT	ctaggggagtggtgtgctg...62...	ggaaaatTTTAC	ccaccagc
	*****	***** **		*****	*****		*****	*** **

id=325101 gene=ENSG00000173068 name=BNC2 segment=chr9_16705081_16727794_-1 type=IN VIEW

Figure 253:



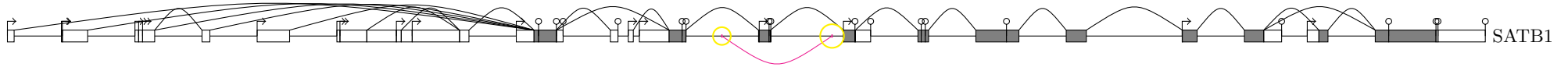
H. Sap	-gtttgaac	tgtc-----ttcagagt...318...-tctgcatgttatcactgccc	CAGAAATCTc	TTACc	CTTG	ctgcagaaatcagccctgga...254... tttgtcctccag	catcacca
R. Mac	-gtttgaac	tgtc-----ttcagagt...313...-tctgcatgttatcactgccc	CAGAAATCTc	TTACc	CTTG	ctgcagaaatcagccctgga...252... tttgtcctccag	catcacca
P. Tro	-gtttgaac	tgtc-----ttcagagt...318...-tctgcatgttatcactgccc	CAGAAATCTc	TTACc	CTTG	ctgcagaaatcagccctgga...254... tttgtcctccag	catcacca
P. Abe	-gtttgaac	tgtc-----ttcagagt...318...-tctgcatgttatcactgccc	CAGAAATCTc	TTACc	CTTG	ctgcagaaatcagccctgga...254... tttgtcctccag	catcacca
C. Jac	-gtttgaac	tgtc-----ttcagagt...315...-tctgcctgttatcactgccc	CAGAAATCTc	TTACc	CTTG	ctgcagaaatcagccctgga...254... tttgtcctccag	cattacca
M. Mus	tatttga-	tgtc-----tccaaagt...324...-tctgcatgttatcactgccc	CAGAAATCTc	TTACc	CTTG	ctgcagaaatcagccctgga...246... tttgtcctccag	catcacca
R. Nor	tatttga-	tgtc-----ttcaaagt...327...-tccgcatgttatcactgccc	CAGAAATCTc	TTACc	CTTG	ctgcagaaatcagccctgga...249... tgtgtcctccag	catcacca
C. Por	-acttgatc	tgtc-----tacaagt...335...ctctgcatg-tatcactgccc	CAGAAATCTc	TTACc	CTTG	ctgcagaaatcagccctgga...261... tttgtcctccag	catcacta
O. Cun	-gtttgaac	tggt-----ttcaaagg...322...-tctgcatgttgtcactgccc	CAGAAATCTc	TTACc	CTTG	ctgcagaaatcagccctgga...273... tgtgtccccag	catcacca
C. Fam	-atattgaac	tgtc-----ttcaaagt...339...-tctgcatgttatcactgccc	CAGAAATCTc	TTACc	CTTG	ctgcagaaatcagccctgga...252... tttgtcctccag	catcacca
F. Cat	-atattgaac	tgtc-----ttcaaagt...326...-tctgcatgttatcactgccc	CAGAAATCTc	TTACc	CTTG	ctgcagaaatcagccctgga...251... tttgtcctccag	catcacca
E. Cab	-gtttgaac	tggtggagctcc-----...313...-actgcatgttatcactgccc	CAGAAATCTc	TTACc	CTTG	ctgcagaaatcagccctgga...252... tttgtcctccag	catcacca
S. Sus	-atattgaat	tgtc-----atcaaagt...363...-tctgcatgttatcactgccc	CAGAAATCTc	TTACc	CTTG	ctgcagaaatcagccctgga...253... tttgttctccag	catcacca
L. Afr	-gatttgagc	tgtc-----tttaaagt...302...-tctgcatgttatcactgccc	CAGAAATCTc	TTACc	CTTG	ctgcagaaatcagccctgga...251... tttgtcctccag	catcacca
	****	***	* * * * *	*****	*****	* * * * *	*** * *

id=720090 gene=ENSG00000130227 name=XP07 segment=chr8.21845859_21846513.1 type=AN

H. Sap	-gtttgaac	tgtc-----ttcagagt...407...ggccagtgtagcttttgaac	CAAGta	GTGAAGATTa	TCTG	aaggataattttctagtca...164... tttgtcctccag	catcacca
R. Mac	-gtttgaac	tgtc-----ttcagagt...402...ggccagtgtagcttttgaac	CAAGta	GTGAAGATTa	TCTG	aaggataattttctagtca...162... tttgtcctccag	catcacca
P. Tro	-gtttgaac	tgtc-----ttcagagt...407...ggccagtgtagcttttgaac	CAAGta	GTGAAGATTa	TCTG	aaggataattttctagtca...164... tttgtcctccag	catcacca
P. Abe	-gtttgaac	tgtc-----ttcagagt...407...ggccagtgtagcttttgaac	CAAGta	GTGAAGATTa	TCTG	aaggataattttctagtca...164... tttgtcctccag	catcacca
C. Jac	-gtttgaac	tgtc-----ttcagagt...404...ggccagtgtagcttttgaac	CAAGta	GTGAAGATTa	TCTG	aaggataattttctagtca...164... tttgtcctccag	cattacca
M. Mus	tatttga-	tgtc-----tccaaagt...413...ggccagtgtagcttttgaac	CAAGta	GTGAAGATTa	TCTG	aaggataattttctagtca...156... tttgtcctccag	catcacca
R. Nor	tatttga-	tgtc-----ttcaaagt...416...ggccagtgtagcttttgaac	CAAGta	GTGAAGATTa	TCTG	aaggataattttctagtca...159... tgtgtcctccag	catcacca
C. Por	-acttgatc	tgtc-----tacaagt...424...ggccagtgtagcttttgaac	CAAGta	GTGAAGATTa	TCTG	aaggataattttctagtca...171... tttgtcctccag	catcacta
O. Cun	-gtttgaac	tggt-----ttcaaagg...411...ggccagtgtagcttttgaac	CAAGta	GTGAAGATTa	TCTG	aaggataattttctagtcc...183... tgtgtccccag	catcacca
C. Fam	-atattgaac	tgtc-----ttcaaagt...428...ggccagtgtagcttttgaac	CAAGta	GTGAAGATTa	TCTG	aaggataattttctagtca...162... tttgtcctccag	catcacca
F. Cat	-atattgaac	tgtc-----ttcaaagt...415...ggccagtgtagcttttgaac	CAAGta	GTGAAGATTa	TCTG	aaggataattttctagtca...161... tttgtcctccag	catcacca
E. Cab	-gtttgaac	tggtggagctcc-----...402...ggccagtgtagcttttgaac	CAAGta	GTGAAGATTa	TCTG	aaggataattttctagtca...162... tttgtcctccag	catcacca
S. Sus	-atattgaat	tgtc-----atcaaagt...452...ggccagtgtagcttttgaac	CAAGta	GTGAAGATTa	TCTG	aaggataattttctagtca...163... tttgttctccag	catcacca
L. Afr	-gatttgagc	tgtc-----tttaaagt...391...ggccagtgtagcttttgaac	CAAGta	GTGAAGATTa	TCTG	aaggataattttctagtca...161... tttgtcctccag	catcacca
	****	***	*****	*****	*****	* * * * *	*** * *

id=720090 gene=ENSG00000130227 name=XP07 segment=chr8.21845859_21846513.1 type=AN VIEW

Figure 254:



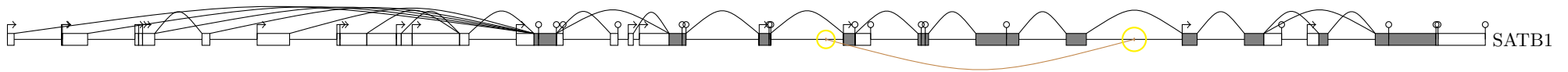
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R. Mac	gccaag	g	taaataatgtgt...330..atctagttctgtttctttta	TCTGTTTCTGATGTTTT	atgggctgtaaagtatTTTT...350..--tatctgaaatag	ggctaatic
P. Tro	gccaag	g	taaataatgtgt...329..atctagttctgtttctttta	TCTGTTTCTGATGTTTT	atgggctgcaaagtatTTTT...355..--tatctgaaatag	ggctaatic
P. Abe	gccaag	g	taaataatgtgt...330..atctagttctgtttctttta	TCTGTTTCTGATGTTTT	atgggctgtaaagtatTTTT...354..--tatctgaaatag	ggctaatic
C. Jac	gccaag	g	taaataatgtgt...329..atctagttctgtttctttta	TCTGTTTCTGATGTTTT	atgggctgtaaagtatTTTT...358..--tatctgaaatag	ggctaatic
M. Mus	gccaag	g	taaaggatgcat...325..atctagttctgtttctttta	TCTGTTTCTGATGTTTT	ataggctgtaaagtatTTTT...347..--tatctggactag	ggctcatc
C. Por	gccaag	g	taaataatgcat...329..atctagttctgtttctttta	TCTGTTTCTGATGTTTT	atgggctgtaaagtatTTTT...347..tttatctg--tag	ggctaatic
O. Cun	gccaag	g	taaataatgcat...320..atctagttctgtttctttta	TCTGTTTCTGATGTTTT	atgggctgtaaagtatTTTT...346..--tatctggaatag	ggctcatc
C. Fam	gccaag	g	taaataatgcat...329..atctagttctgtttctttta	TCTGTTTCTGATGTTTT	atgggctgtaaagtatTTTT...368..--tatctgcaatag	gcctaatic
B. Tau	gccaag	g	taaataatgcat...330..atctagttctgtttctttta	TCTGTTTCTGATGTTTT	atgggctgtaaagtatTTTT...347..--tatctggaatag	ggctgatc
E. Cab	gccaag	g	taaataactgcat...329..atctagttctgtttctttta	TCTGTTTCTGATGTTTT	atgggctgtaaagtatTTTT...351..--tatccggaatag	ggctaatic
S. Sus	gccaag	g	taaataatgcat...330..atctagttctgtttctttta	TCTGTTTCTGATGTTTT	atgggctgtaaagtatTTTT...355..--tatctggcatag	ggctaatic
O. Avi	gccaag	g	taaataatgcat...332..atctagttctgtttctttta	TCTGTTTCTGATGTTTT	atgggctgtaaagtatTTTT...346..--tatctggaacag	ggctgatc
L. Afr	gccaag	g	taaataacgcac...333..atctagttctgtttctttta	TCTGTTTCTGATGTTTT	atgggctgtaaagtatTTTT...358..--tatctggaatag	ggctaatic
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id=198120 gene=ENSG00000182568 name=SATB1 segment=chr3_18457626_18458392_-1 type=IN

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R. Mac	cacag	gtg	agtcaagacagc...601..tataaagtaattaactaatc	GGAACaATCAGgAGACcgAGAG	caatctccagatgcatctgt...82..tatgtctcaaat	agttgcc
P. Tro	cacag	gtg	agtcaagacagc...595..tataaagtaattaactaatc	GGAACaATCAGgAGACcgAGAG	caatctccagatgcatctgt...82..tatgtctcaaat	agttgcc
P. Abe	cacag	gtg	agtcaagacagc...594..tataaagtaattaactaatc	GGAACaATCAGgAGACcgAGAG	caatctccagatgcatctgt...82..tatgtctcaaat	agttgcc
C. Jac	cacag	gtg	agtcaagacagc...597..tataaagtaattaactaatc	GGAACaATCAGgAGACcgAGAG	caatctccagatgcatctgt...82..tatgtctcaaat	agttgcc
M. Mus	cacag	gtg	agtcaggcagg...586..tataaagtaattaactaatc	GGAACaATCAGgAGACcgAGAG	caatctccagatgcatctgt...82..tctgtctcaaat	agttgcc
C. Por	cacag	gtg	agtcaggcagg...544..tataaagtaattaactaatc	GGAACaATCAGgAGACcgAGAG	caatctccagatgcatctgt...82..tatgtctcaaat	agttgcc
O. Cun	cacag	gtg	agtcaggcagg...558..tataaagtaattaactaatc	GGAACaATCAGgAGACcgAGAG	caatctccagatgcatctgt...82..tgtgtctccaac	agttgcc
C. Fam	cacag	gtg	agtcaggcagg...600..tataaagtaattaactaatc	GGAACaATCAGgAGACcgAGAG	caatctccagatgcatctgt...82..tatgtctcaaat	agttgcc
B. Tau	cacag	gtg	agtcaggaaagc...655..tataaagtaattaactaatc	GGAACaATCAGgAGACcgAGAG	caatctccagatgcatctgt...82..tgtgtctccaac	agttgcc
E. Cab	cacag	gtg	agtcaggcagg...575..tataaagtaattaactaatc	GGAACaATCAGgAGACcgAGAG	caatctccagatgcatctgt...82..tatgtctcaaat	agttgcc
S. Sus	cacag	gtg	agtcaggatggc...599..tataaagtaattaactaatc	GGAACaATCAGgAGACcgAGAG	caatctccagatgcatctgt...82..tgtgtctccaac	agttgcc
O. Avi	nmnnn	ntg	agtcaggaaagc...666..tataaagtaattaactaatc	GGAACaATCAGgAGACcgAGAG	caatctccagatgcatctgt...82..tgtgtctccaac	agttgcc
L. Afr	cacag	gtg	agtcaagacagc...614..tataaagtaattaactaatc	GGAACaATCAGgAGACcgAGAG	caatctccagatgcatctgt...82..tatgtctcaaat	agttgcc
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id=198125 gene=ENSG00000182568 name=SATB1 segment=chr3_18456729_18457495_-1 type=IN VIEW

Figure 256:



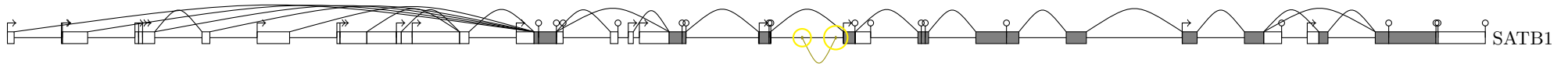
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R. Mac	cacag	gtg	agtcaagacagc...538...	tgaaaaaatagccaccacag	GCAGC	TGATGTAT	aattcatgcatcgatacagc...	154...	tatgtctcaaat	agttgccc
P. Tro	cacag	gtg	agtcaagacagc...532...	tgaaaaaatagccaccacag	GCAGC	TGATGTAT	aattcatgcatcgatacagc...	154...	tatgtctcaaat	agttgccc
P. Abe	cacag	gtg	agtcaagacagc...531...	tgaaaaaatagccaccacag	GCAGC	TGATGTAT	aattcatgcatcgatacagc...	154...	tatgtctcaaat	agttgccc
C. Jac	cacag	gtg	agtcaagacagc...534...	tgaaaaaatagccaccacag	GCAGC	TGATGTAT	aattcatgcatcgatacagc...	154...	tatgtctcaaat	agttgccc
M. Mus	cacag	gtg	agtcaggcagg...523...	tgaaaaaatagccaccacag	GCAGC	TGATGTAT	aattcatgcatcgatacagc...	154...	tctgtctcaaat	agttgccc
C. Por	cacag	gtg	agtcaaggctgt...481...	tgaaaaaatagccaccacag	GCAGC	TGATGTAT	aattcatgcatcgatacagc...	154...	tatgtctcaaat	agttgccc
O. Cun	cacag	gtg	agtcaggacagc...537...	tgaaaaaatagccaccacag	GCAGC	TGATGTAT	aattcatgcatcgatacagc...	154...	tatgtctcaaat	agttgccc
C. Fam	cacag	gtg	agtcaggacagc...537...	tgaaaaaatagccaccacag	GCAGC	TGATGTAT	aattcatgcatcgatacagc...	154...	tatgtctcaaat	agttgccc
B. Tau	cacag	gtg	agtcaggaaagc...592...	tggaaaaatagccaccacag	GCAGC	TGATGTAT	aattcatgcatcgatacagc...	154...	tgtgtctcaaat	agttgccc
E. Cab	cacag	gtg	agtcaggacagc...512...	tgaaaaaatagccaccacag	GCAGC	TGATGTAT	aattcatgcatcgatacagc...	154...	tatgtctcaaat	agttgccc
S. Sus	cacag	gtg	agtcaggatggc...536...	tgaaaaaatagccaccacag	GCAGC	TGATGTAT	aattcatgcatcgatacagc...	154...	tgtgtctcaaat	agttgccc
O. Avi	nnnnn	ntg	agtcaggaaagc...603...	tggaaaaatagccaccacag	GCAGC	TGATGTAT	aattcatgcatcgatacagc...	154...	tgtgtctcaaac	agttgccc
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P. Tro	ctccccag	gtg	cgggtctcct...4761...	cagttgctgtcatattacag	ATGCaATCA	CTGT	gacaatgtgacttccttaac...	150...	-aaaatgtttgt	aggtgaaa
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C. Jac	ctccccag	gtg	cagtcctcct...4761...	cagttgctgtcatattacag	ATGCaATCA	CTGT	gacaatgtgacttccttaac...	150...	-aaaatgtttgt	aggtgaaa
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C. Fam	ctccccag	gtg	gaagtcctcct...4761...	cagttgctgtccttattacag	ATGCaATCA	CTGT	gacaatgtgacttccttaac...	150...	-aaaatgtttgt	aggtgaaa
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O. Avi	ctccccag	gtg	gagctcctcct...4761...	cagttgctgtcatattacag	ATGCaATCA	CTGT	ggcaatgtgacttccttaac...	150...	-aaaatgtttgt	aggtgaaa
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Figure 257:



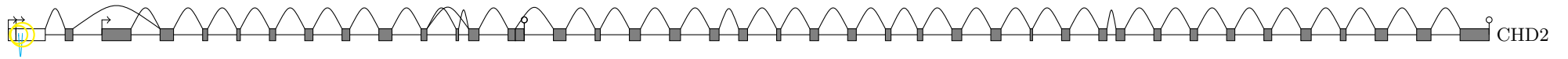
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P. Abe	cacag	gtg	agtcaagacagc...281...-aagtttacttaagaaaaaa	TGTT	TTGCAT	TATC	GAACAGTGC	ATCTG	gtgtacat	ttt	gtgaaagact...396...tatgtctcaaat	agttgccc	
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M. Mus	cacag	gtg	agtccaggcagg...266...-aagtttacttaagaaaaaa	TATT	TTGCa	TATC	GAACAGTGC	ATCTG	gtgtacat	ttt	gtgaaagaat...393...tctgtctcaaat	agttgccc	
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E. Cab	cacag	gtg	agtcaggacagc...259...-aagtttacttaagagaaaaa	TATT	TTGCa	TATC	GAACAATGC	ATCTG	gtgtacat	ttt	gtgaaagaat...389...tatgtctcaaat	agttgccc	
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O. Avi	nnnnn	ntg	agtcaggaaagc...338...-aagtttacttaagagaaaaa	TATT	TTGCa	TATC	GAACAGTGC	ATCTG	gtgtacat	ttt	gtgaaagaat...401...tgtgtctccaac	agttgccc	
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R. Mac	cacag	gtg	agtcaagacagc...630...aggagaccgagagcaatctc	CAGATGCAT	CGTTT	GATG	CGCAAAATG	gaaatctgt	ctgtct	taaggg...47...tatgtctcaaat	agttgccc
P. Tro	cacag	gtg	agtcaagacagc...624...aggagaccgagagcaatctc	CAGATGCAT	CGTTT	GATG	CGCAAAATG	gaaatctgt	ctgtct	taaggg...47...tatgtctcaaat	agttgccc
P. Abe	cacag	gtg	agtcaagacagc...633...-----gagcaatctccagatgcatc	CGTTT	GATG	CGCAAAATG	gaaatctgt	ctgtct	taaggg...47...tatgtctcaaat	agttgccc	
C. Jac	cacag	gtg	agtcaagacagc...626...aggagaccgagagcaatctc	CAGATGCAT	CGTTT	GATG	CGCAAAATG	gaaatctgt	ctgtct	taaggg...47...tatgtctcaaat	agttgccc
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O. Cun	cacag	gtg	agtcacgacggc...587...aggagaccgagagcaatctc	CAGATGCAT	CGTTT	GATG	CGCAAAATG	gaaatctgt	ctgtct	taaggg...47...tgtgtctccaac	agttgccc
C. Fam	cacag	gtg	agtcaggacagc...629...aggagaccgagagcaatctc	CAGATGCAT	CGTTT	GATG	CGCAAAATG	gaaatctgt	ctgtct	taaggg...47...tatgtctcaaat	agttgccc
B. Tau	cacag	gtg	agtcaggaaagc...684...aggagaccgagagcaatctc	CAGATGCAT	CGTTT	GATG	CGCAAAATG	gaaatctgt	ctgtct	taaggg...47...tgtgtctccaac	agttgccc
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id=198125 gene=ENSG00000182568 name=SATB1 segment=chr3_18456729_18457495_-1 type=IN VIEW

Figure 258:



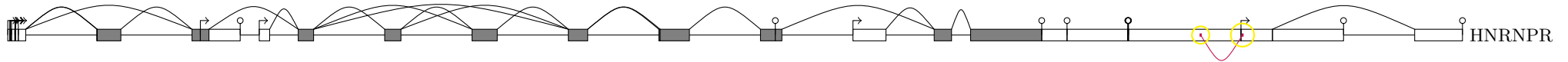
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C.Jac	gcagagct	ctcagagctgggaaggaggctctagatggcGGCTgtGCCTtAGAGAGagcgcgctctgctccctgcc...422...tacatggatcag	gtaagttc
M.Mus	gcagagct	ctcagagctgggaaggaggctctagatggcGGCTgtGCCTtAGAGAGagcgcgctctgctccctgct...425...tacatggatcag	gtaagtcc
R.Nor	gcagagct	ctcagagctgggaaggaggctctagatggcGGCTgtGCCTtAGAGAGagcgcgctctgctccctgct...425...tacatggatcag	gtaagtct
C.Por	gcagagct	ctcagagctgggaaggaggctctagatggcGGCTgtGCCTtAGAGAGagcgcgctctgctccctg--...422...tacatggatcag	gtaagttc
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C.Jac	gcagagct	ctcagagctggg--...64...ctttacgcaactttccctaaCTTTCGGGCAGCctcagggggccccgcagccc...360...tacatggatcag	gtaagttc
M.Mus	gcagagct	ctcagagctggg--...63...ctttacgcaactttccctaaCTTTCGGGCAGCctcagggggccccgcagccc...364...tacatggatcag	gtaagtcc
R.Nor	gcagagct	ctcagagctggg--...63...ctttacgcaactttccctaaCTTTCGGGCAGCctcagggggccccgcagccc...364...tacatggatcag	gtaagtct
C.Por	gcagagct	ctcagagctggg--...62...acttacgcaactttccctaaCTTTCGGGCAGCctcagggggccccgcagccc...360...tacatggatcag	gtaagttc
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Figure 260:



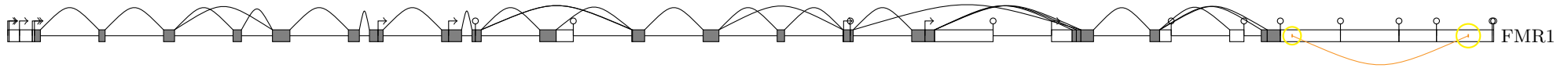
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R. Mac	aaa	ca	tt	acctatttcaaat...2806...----agtggtttatgtttctcta	AGAATgGGAGCTTCTG	TAACCT	aggggtggagttgttctgag-----	...250...atttagaggta	ccagaagc
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C. Jac	aaa	ca	tt	acctatttcaaat...2752...----agtggtttatgtttctcta	AGAATgGGAGCTTCTG	TAACCT	aggggtggagttgttctgag-----	...246...atttagaggta	ccagaagc
M. Mus	aaa	ca	tc	acctatttcaaat...2778...tagaaatgtgtt--tgtttctc--	TGAAATGGAGCTTCTG	TAACCT	aggggtggagttgttctgag-----	...265...actttgaggta	ccagaagc
R. Nor	aaa	ca	tc	acctatttcaaat...2813...tagaaatgtgtt--tgtttctc--	TGAAATGGAGCTTCTG	TAACCT	aggggtggagttgttctgag-----	...264...actttgaggta	ccagaagc
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O. Cun	aaa	ca	tt	acctatttcaaat...2695...----agtggtttatgtttctcta	AGAATgGGAGCTTCTG	TAACCT	aggggtggagttgttctgag-----	...285...atttagaggta	ccagaagc
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B. Tau	aaa	ca	tt	acctatttcaaat...2741...--aagtgtgtttatgtttctct	AAGAATgGGAGCTTCTG	TAACCT	-----a--gttctgagtaagccgtgg...	...239...atttagaggta	ccagaagc
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L. Afr	aaa	ca	tt	acctatttcaaat...2814...----gtgtgtttatgtttctctaa	GGATgGGAGCTTCTG	TAACCT	agaagtgagttcttataaa-----	...250...atttagaggta	ccagaagc
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P. Tro	agAGGTTA	cCAGAAGCTCT	-gGTTTT	-gttttgttttg-ttttgtttt	----...172...gtggaattggtg	gtaagaac
P. Abe	agAGGTTA	cCAGAAGCTCT	-gGTTTT	-gttttgttttg-ttttgtttt	----...171...gtggaattggtg	gtaagaac
C. Jac	agAGGTTA	cCAGAAGCTCT	-gGTTTT	-gttttgttttg-ttttgtttt	----...173...gtggaattggtg	gtaagaac
M. Mus	tgAGGTTA	cCAGAAGCTCT	-gGTTTTG	-----ctttggttttgctttttat	...158...gtggaattggtg	gtaagaac
R. Nor	tgaGGTTA	cCAGAAGCTCT	-gGTTTTG	-----ctttggttttgctttttta	...159...gtggaattggtg	gtaagaac
C. Por	agAGGTTA	cCAGAAGCTCT	-gGTTTT	-----ggttttgttttggtttttta	...160...gtggaattggtg	gtaagaac
O. Cun	agAGGTTA	cCAGAAGCTCT	-gGTTTT	-----ggttttggtttggtttttat	...158...gtggaattggtg	gtaagaac
C. Fam	agAGGTTA	cCAGAAGCTCT	agGTTTT	-----tgttttg-ttttgttttgt	...166...gtggaattggtg	gtaagaaa
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B. Tau	agAGGTTA	cCAGAAGCTCT	ggGTTTT	gttttggttttggtttctgt	-----...165...gtggaattggtg	gtaagaac
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O. Avi	agAGGTTA	cCAGAAGCTCT	ggGTTTT	gttttggttttggtttctgt	-----...165...gtggaattggtg	gtaagaac
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Figure 261: CS=7.2



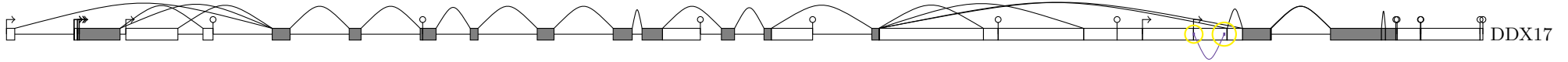
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R.Mac	ac	ctgcataattct...55...g	ttaggccaagaca	aatag	TAGGCAAGaTGGC	acagggcatgaa	tgaacac--...382...acattt	gtcatt	ttcattag
P.Tro	ac	ctgcataattct...55...g	ttaggccaagaca	aatag	TAGGCAAGaTGGC	acagggcatgaa	tgaacac--...382...acattt	gtcatt	ttcattag
P.Abe	ac	ctgcataattct...55...g	ttaggccaagaca	aatag	TAGGCAAGaTGGC	acagggcatgaa	tgaacac--...382...acattt	gtcatt	ttcattag
C.Jac	ac	ctgcataattct...55...g	ttaggccaagaca	aatag	TAGGCAAGaTGGC	acagggcatgaa	tgaacac--...382...acattt	gtcatt	ttcattag
M.Mus	taa	ataaagctacataattcc...55...g	ttaggccaagaca	aatag	TAGGCAAGaTGGC	acagggcatgaa	tgaacac--...374...acattt	gttatt	ttcattag
R.Nor	ac	ctc	taaaacacataattct...55...a	ttaggccaagaca	aatag	TAGGCAAGaTGGC	acagggcatgag	gttgaacac--...373...acattt	gttatt
C.Por	ac	ctc	taaaacacataattct...55...g	ttaggccaagaca	aatag	TAGGCAAGaTGGC	acagggcatgaa	tgaacac--...385...acattt	gtcatt
O.Cun	ac	ctc	taaaacacataattct...54...g	ttaggccaagaca	aatag	TAGGCAAGaTGGC	acagggcatgaa	tgaacac--...378...acattt	gtcatt
C.Fam	ac	ctc	taaaacacataattct...55...g	ttaggccaagaca	aatag	TAGGCAAGaTGGC	acagggcatgaa	tgaacac--...392...acgttt	gtcatt
B.Tau	ac	ctc	taaaacacataattct...55...g	ttaggccaagaca	aatag	TAGGCAAGaTGGC	acagggcatgaa	tgaacac--...389...acgttt	gtcatt
S.Sus	ac	ctcg	taattct...55...g	ttaggccaagaca	aatag	TAGGCAAGaTGGC	acagggcatgaa	tgaacac--...390...acgttt	gtcatt
L.Afr	ac	ctgc	ataatacc...55...g	ttaggccaagaca	aatag	TAGGCAAGaTGGCC	acagggcatgac	tgaacacaa...387...acattt	gtcatt
	***	** * **** *	*****	*****	*** *****	***	** *****	***	** ****

id=495157 gene=ENSG0000102081 name=FMR1 segment=chrX_147030366_147030879.1 type=E3

H.Sap	ctctgcta	aattgatg	tgtga...226...--aaggctg	tattcagcaagc	GCTAaCTTGCTTA	aatgtgaattacta	aacttct...173...gttg	cacttatg	aaaaagca
R.Mac	ctctgcta	aactgatg	tgtga...226...--aaggctg	aattcagcaagc	GCTAaCTTGCTTA	aatgtgaattacta	aacttct...173...gttg	cacttatg	aaaaagca
P.Tro	ctctgcta	aattgatg	tgtga...226...--aaggctg	tattcagcaagc	GCTAaCTTGCTTA	aatgtgaattacta	aacttct...173...gttg	cacttatg	aaaaagca
P.Abe	ctctgcta	aattgatg	tgtga...226...--aaggctg	tattcagcaagc	GCTAaCTTGCTTA	aatgtgaattacta	aacttct...173...gttg	cacttatg	aaaaagca
C.Jac	ctctgcta	aattgatg	tgtga...226...--aaggctg	aattcagcaagc	GCTAaCTTGCTTA	aatgtgaattacta	aacttct...173...gttg	cacttatg	aaaaagca
M.Mus	ctctgcta	aattgatg	tgtga...232...--aaggctg	aattcagcaagc	GCTAaCTTGCTTA	aatgtgaattacta	aacttct...175...gttg	cacttatg	aaaaagca
R.Nor	ctctgcta	aattgatg	tgtga...232...--aaggctg	aattcagcaagc	GCTAaCTTGCTTA	aatgtgaattacta	aacttct...175...gttg	cacttatg	aaaaagca
C.Por	ctctgcta	aattgatg	tgtca...233...--aaggctg	aattcagcaagc	GCTAaCTTGCTTA	aatgtgaattacta	aacttct...165...gttg	cacttatg	aaaacaca
O.Cun	ctctgcta	aa-tgatg	tgtgat...234...--aaggctg	aattcagcaagc	GCTAaCTTGCTTA	aatgtgaattacta	aacttct...175...cttg	cacttatg	aaaaagca
C.Fam	ctctgcta	aattgatg	tgtga...237...--aaggctg	aattcagcaagc	GCTAaCTTGCTTA	aatgtgaattacta	aacttct...173...gttg	cacttatg	aaaaagca
B.Tau	ctctgcta	cactgatg	tgtga...233...--acagctg	aattcagcaagc	GCTAaCTTGCTTA	aatgtgaattacta	aacttct...173...gttg	cacttatg	aaaaagca
S.Sus	ctctgcta	aattgacg	tgtga...235...--aaggctg	aattcagcaagc	GCTAaCTTGCTTA	aatgtgaattacta	aacttct...174...gttg	cacttatg	aaaaagca
L.Afr	ctctgcta	aattgatg	tgtga...231...caaaggctg	aattcagcaagc	GCGCTAaCTTGCTTA	aatgtgaattacta	aacttct...175...gttg	cacttatg	aaaacgca
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id=495160 gene=ENSG0000102081 name=FMR1 segment=chrX_147032157_147032632.1 type=E3 VIEW

Figure 263:



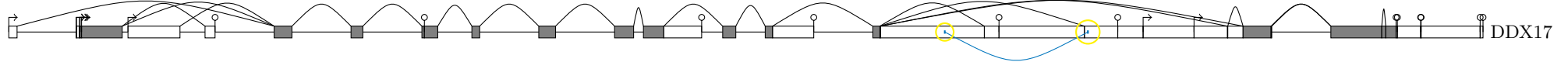
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R. Mac	ttgtgtct	caaggtttcatg...380...--tgttggttagat	tttgcc	AGGCTT	cTCCCAACA	GAGTAGAa	
P. Tro	ttgtgtct	caaggtttcatg...377...--tgttggttagat	tttgcc	AGGCTT	cTCCCAACA	GAGTAGAa	
P. Abe	ttgtgtct	caaggtttcatg...377...--tgttggttagat	tttgcc	AGGCTT	cTCCCAACA	GAGTAGAa	
C. Jac	actgtgtct	caaggtttcatg...376...--tgttggttagat	tttgcc	AGGCTT	cTCCCAACA	GAGTAGAa	
M. Mus	gtgtgtct	caaggtttcatg...346...--tattggttagact	gtgccc	AGGCTT	cTCCCAACA	GAGTAAa	
R. Nor	gtgtgtct	caaggtttcatg...343...--tattggttagact	gtgccc	AGGCTT	cTCCCAACA	GAGTAGAa	
C. Por	ttgtgcct	caaggtttcatg...353...--tgtttcggttagat	tttgcc	AGGCTT	cTCCCAACA	GAGTAGAa	
O. Cun	aactgtct	caaggtttcatg...375...--tggtggttagag	tttgcc	AGGCTT	cTCCCAACA	GAGTAGAa	
C. Fam	aagtgtct	caaggtttcatg...388...--tattactggttagat	tttgcc	AGGCTT	cTCCCAACA	GAGTAGAa	
F. Cat	ttgtgtct	caaggtttcatg...372...--tattactggttagat	tttgcc	AGGCTT	cTCCCAACA	GAGTAGAa	
B. Tau	ttgtgtct	caaggtttcatg...391...--tattactggttagat	tttgcc	AGGC	TCTCCCAACA	GAGTAGAa	
E. Cab	ttgtgtct	caaggtttcatg...369...--tgttactggttagat	tttgcc	AGGCTT	cTCCCAACA	GAGTAGAa	
S. Sus	ttgtgtct	caaggtttcatg...368...--tattactggttagat	tttgcc	AGGCTT	cTCCCAACA	GAGTAGAa	
O. Avi	ttgtgtct	caaggtttcatg...405...--tattactggttagat	tttgcc	AGGC	TCTCCCAACA	GAGTAGAa	
L. Afr	tcgtgtct	caaggtttcatg...347...catgttactgat	--at	tttgcc	AGGCTT	cTCCCAACA	GAGTAga
	** ** *	*****		* * * * *	*****	*****	**** *

id=495330 gene=ENSG00000100201 name=DDX17 segment=chr22_38884536_38884966_-1 type=AN

H. Sap	tccaaca	gagtagaagtga...208...--cccaggaatcagt	----aatcctc	TTTACTCTGTTGGGA	tGAGTCT	-tttttgtttctgttcagag	tggttact
R. Mac	tccaaca	gagtagaagtga...208...--cctaggaatcagg	----aatcctc	TTTACTCTGTTGGGA	tGAGTCT	-tttttgtttctgttcagag	tggttact
P. Tro	tccaaca	gagtagaagtga...208...--cccaggaatcagt	----aatcctc	TTTACTCTGTTGGGA	tGAGTCT	-tttttgtttctgttcagag	tggttact
P. Abe	tccaaca	gagtagaagtga...208...--tccaggaatcagt	----aatcctc	TTTACTCTGTTGGGA	tGAGTCT	-tttttgtttctgttcagag	tggttact
C. Jac	tccaaca	gagtagaagtga...206...tgtcccaggaatcag	-----tccctc	TTTACTCTGTTGGGA	tGAGTCT	-ccttttgtttctgttcagag	tggttact
M. Mus	tccaaca	gagtagaagtga...202...--cctgagtggcact	----gatcctc	TTTACTCTGTTGGGA	tGAGTCT	ttttttgtacctactcaggg	cagttact
R. Nor	tccaaca	gagtagaagtga...202...--ctgcacggcact	----gatcctc	TTTACTCTGTTGGGA	tGAGTCT	-tcttttgtacctactcaggg	tggtcact
C. Por	tccaaca	gagtagaagtga...205...--ctcaagaaccact	----aatcctc	TTTACTCTGTTGGGA	tGAGTCT	-tttttgttccctgttcagag	tggttact
O. Cun	tccaaca	gagtagaagtga...184...-----ggaaccactaat	caatcctc	TTTACTCTGTTGGGA	tGAGTCT	-tgttttgttccctgttcagag	cggttact
C. Fam	tccaaca	gagtagaagtga...187...--ccaagaatcatt	----catcctc	TTTACTCTGTTGGGA	tGAGTCT	-tttttgttcatgttcagtg	tggttact
F. Cat	tccaaca	gagtagaagtga...184...--ccaagaatcatt	----aatcctc	TTTACTCTGTTGGGA	tGAGTCT	-tttttgttccctgttcagaa	tggttact
B. Tau	tccaaca	gagtagaagtga...176...--tccaagcatcatt	----aatcctc	TTTACTCTGTTGGGA	tGAGTCT	-tttttgttccctgttcagag	tggtcact
E. Cab	tccaaca	gagtagaagtga...188...--ccaagaatcatt	----aatcctc	TTTACTCTGTTGGGA	tGAGTCT	-tttttgttccctgttcagag	tggtcact
S. Sus	tccaaca	gagtagaagtga...174...--ccaagcatcatt	----aatcctc	TTTACTCTGTTGGGA	tGAGTCT	-tttttgttccctgttcagag	tggttact
O. Avi	tccaaca	gagtagaagtga...176...--ccaagcatcatt	----aatcctc	TTTACTCTGTTGGGA	tGAGTCT	-tttttgttccctgttcagag	tggttact
L. Afr	tccaaca	gagtagaagtga...213...--c--agaatcact	----aatcctc	ttgTACTCTGTTGGGA	tGAGTCT	-tttttgtttctgttcagag	tggtcact
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id=495331 gene=ENSG00000100201 name=DDX17 segment=chr22_38884253_38884535_-1 type=AN VIEW

Figure 264: CS=12.48



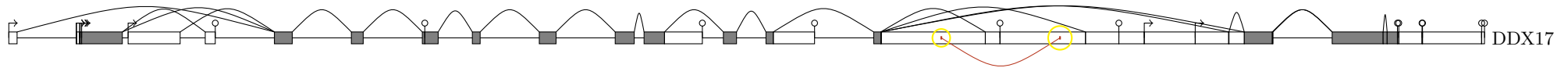
H.Sap	ctag gttt	gtatagataggt...1220...---	tttcttggttactcaacatca	GTGCTTg	TTTTGGGCCCCCTTTGt	TTGCTG	---	ccttgtaaaaaatcaaaaga---	...302...	gtttttaacag	aagctttg	
R.Mac	ctag gttt	gtatagataggt...1216...---	tttcttggttactcaacatca	GTGCTTg	TTTTGGGCCCCCTTTGt	TTGCTG	---	ccttgtaaaaaatcaaaaga---	...301...	gtttttaacag	aagctttg	
P.Tro	ctag gttt	gtatagataggt...1224...---	tttcttggttactcaacatca	GTGCTTg	TTTTGGGCCCCCTTTGt	TTGCTG	---	ccttgtaaaaaatcaaaaga---	...302...	gtttttaacag	aagctttg	
P.Abe	ctag gttt	gtatagataggt...1225...---	tttcttggttactcaacatca	GTGCTTg	TTTTGGGCCCCCTTTGt	TTGCTG	---	ccttgtaaaaaatcaaaaga---	...301...	gtttttaacag	aagctttg	
C.Jac	ctag gttt	gtatagataggt...1262...---	tttcttggttactcaacatca	GTGCTTg	TTGTGg	GCCCCCTTTGt	TTGCTG	---	ccttgtaaaaaatcaaaaga---	...305...	gtttttaacag	aagctttg
M.Mus	ctag gttt	gtatagataggt...1383...---	tttcttggttactcaacatca	GTGCTTg	TTTTGGGCCCCCTTTGt	TTGCTG	---	ccttgtaaaaaatcaaaagga---	...330...	gtttttaacag	aagctttg	
R.Nor	ctag gttt	gtatagataggt...1959...---	ttctgaccaaggtcc---	tacaa	GATCCCTG	aaAGTG	aaggcttctacgtcatagc	---	...243...	gtttttaacag	aagctttg	
C.Por	ctag gttt	gtatagataggt...1221...---	tcagtgtttactttgggcc---	---	CTTTa	TTTc	TGCC	---	ttgtaaaaaatcaaaaggagg...	...298...	gtttttaacag	aagctttg
O.Cun	ctag gttt	gtatagataggt...1203...---	catcatcagtgcttgttctg	GGCCCCCTTTGt	TTGCTG	---	ccttgtaaaaaatcaaaaggag---	...296...	gtttttaacag	aagctttg		
C.Fam	ctag gttt	gtatagataggt...1247...---	tttcttggttactcagcatca	GTGCTTg	TTTTGGGCCCCCTTTGt	TTGCTG	---	cctcataaaaaatcaaaagga---	...309...	gtttttaacag	aagctttg	
F.Cat	ctag gttt	gtatagataggt...1504...---	tttcttggttactcagcatca	GTGCTTg	TTTTGGGCCCCCTTTGt	TTGCTG	---	ccttgtaaaaaatcaaaagga---	...310...	gtttttaacag	aagctttg	
B.Tau	ctag gttt	gtatagataggt...1232...---	tttcttggttactcaacatca	GTGCTTg	TTTTGGGCCCCCTTTGt	TTGCTG	---	ccttgtaaaaaatcgaaggagg---	...338...	gtttttaacag	aagctttg	
E.Cab	ctag gttt	gtatagataggt...1252...---	tttcttggttactcgacatca	GTGCTTg	TTTTGGGCCCCCTTTGt	TTGCTG	---	ccttgtaaaaaatcaaaagga---	...302...	gtttttaacag	aagctttg	
S.Sus	ctag gttt	gtatagataggt...1242...---	ttactcaacatcagcgattg	TTTTGGGCCCCCTTTGt	TTGCTG	---	ccttgtaaaaaatcaaaagga---	...306...	gtttttaacag	aagctttg		
O.Avi	ctag gttt	gtatagataggt...1243...---	tttcttggttactcaacatca	GTGCTTg	TTTTGGGCCCCCTTTGt	TTGCTG	---	ccttgtaaaaaatcaaaagga---	...336...	gtttttaacag	aagctttg	
L.Afr	ctag gttt	gtacagataggt...1203...ctg	tttcttggttactcaaca	TTAGTGCTTg	TTTTGGGCCCCCTTTGt	TTGCTG	---	ccttgtaaaaaatcagaagga---	...313...	gtttttaacag	aagctttg	
	****	****	***	*****		** *	* * *		*****	*****		

id=495325 gene=ENSG00000100201 name=DDX17 segment=chr22_38886442_38888056_-1 type=AN

H.Sap	gaaccag gttctcggcgct	-----	-----	-----	-----	TGGCAAc	CAAA	GGGGCTa	CAGAGAAGCAT	ctaagccagttcacagagcgagcgtgtg	::::	atgtttttaattatttatatcacaaaaatct	gt	
R.Mac	gaaccag gttctcggcgct	-----	-----	-----	-----	TGGCAAc	CAAA	GGGGCTa	CAGAGAAGCAT	ctaagccagttcacagagcgagcgtgtg	::::	atgtttttaattatttatatcacaaaaatct	gt	
P.Tro	gaaccag gttctcggcgct	-----	-----	-----	-----	TGGCAAc	CAAA	GGGGCTa	CAGAGAAGCAT	ctaagccagttcacagagcgagcgtgtg	::::	atgtttttaattatttatatcacaaaaatct	gt	
P.Abe	gaaccag gttctcggcgct	-----	-----	-----	-----	TGGCAAc	CAAA	GGGGCTa	CAGAGAAGCAT	ctaagccagttcacagagcgagcgtgtg	::::	atgtttttaattatttatatcacaaaaatct	gt	
C.Jac	gaaccag gttctcggcgct	-----	-----	-----	-----	TGGCAAc	CAAA	GGGGCTa	CAGAGAAGCAT	ctaagccagttcacagagcgagcgtgtg	::::	atgtttttaattatttatatcacaaaaatct	gt	
M.Mus	gaaccag gttctcggcgct	-----	-----	-----	-----	TGGCAAc	CAAA	GGGGCTa	CAGAGAAGCAT	ctaagccagttcacagagcgagcgtgtg	::::	atgtttttaattatttatatcacaaaaatct	gt	
R.Nor	gaaccag gttctcggcgct	ttggcaaccaaatggggcta	::::	::::	::::	TGGCAAc	CAAA	GGGGCTa	CAGAGAAGCAT	ctaagccagttcacagagcgagcgtgtg	::::	atgtttttaattatttatatcacaaaaatct	gt	
C.Por	gaaccag gttctcggcgct	ttggcaaccaaatggggcta	::::	gcagcggtttccaaaggaggaggagtgatcggtct	GGTAa	CAAA	---	cAGAG	-----	-----	::::	atgtttttaattatttatatcacaaaaatct	gt	
O.Cun	gaaccag gttctcggcgca	-----	-----	-----	-----	TGGCAAc	CAAA	GGGGCTa	CAGAGAAGCAT	ctaagccagttcacagagcgagcgtgtg	::::	atgtttttaattatttatatcacaaaaatct	gt	
C.Fam	gaaccag gttctcggcgct	-----	-----	-----	-----	TGGCAAc	CAAA	GGGGCTa	CAGAGAAGCAT	ctaagccagttcacagagcgagcgtgtg	::::	atgtttttaattatttatatcacaaaaatct	gt	
F.Cat	gaaccag gttctcggcgct	-----	-----	-----	-----	TGGCAAc	CAAA	GGGGCTa	CAGAGAAGCAT	ctaagccagttcacagagcgagcgtgtg	::::	atgtttttaattatttatatcacaaaaatct	gt	
B.Tau	gaaccag gttctcggcgct	-----	-----	-----	-----	TGGCAAc	CAAA	GGGGCTa	CAGAGAAGCAT	ctaagccagttcacagagcgagcgtgtg	::::	atgtttttaattatttatatcacaaaaatct	gt	
E.Cab	aaaccag gttctcggcgct	-----	-----	-----	-----	TGGCAAc	CAAA	GGGGCTa	CAGAGAAGCAT	ctaagccagttcacagagcgagcgtgtg	::::	atgtttttaattatttatatcacaaaaatct	gt	
S.Sus	gaaccag gttctcggcgct	-----	-----	-----	-----	TGGCAAc	CAAA	GGGGCTa	CAGAGAAGCAT	ctaagccagttcacagagcgagcgtgtg	::::	atgtttttaattatttatatcacaaaaatct	gt	
O.Avi	gaaccag gttctcggcgct	-----	-----	-----	-----	TGGCAAc	CAAA	GGGGCTa	CAGAGAAGCAT	ctaagccagttcacagagcgagcgtgtg	::::	atgtttttaattatttatatcacaaaaatct	gt	
L.Afr	gaaccag gttctcggcgct	-----	-----	-----	-----	TGGCAAc	CAAA	GGGGCTa	CAGAGAAGCAT	CTAAG	gccagttcacagagcgagcgtgtg	::::	atgtttttaattatttatatcacaaaaatct	gt
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id=495328 gene=ENSG00000100201 name=DDX17 segment=chr22_38885182_38885463_-1 type=AN VIEW

Figure 265:



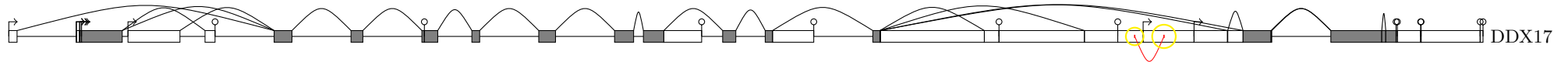
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R. Mac	ctag gttt	gtatagataggt...1191...	gggagaggggaaggtacc-	gaGTCTGTTTCTTGTAC	tcaacatcagtgcttgttt...	.339...	gtttttaaacag	aagctttg
P. Tro	ctag gttt	gtatagataggt...1199...	gggagaggggaaggtacc-	gaGTCTGTTTCTTGTAC	tcaacatcagtgcttgttt...	.340...	gtttttaaacag	aagctttg
P. Abe	ctag gttt	gtatagataggt...1200...	gggagaggggaaggtacc-	gaGTCTGTTTCTTGTAC	tcaacatcagtgcttgttt...	.339...	gtttttaaacag	aagctttg
C. Jac	ctag gttt	gtatagataggt...1237...	gggagaggggaaggtacc-	gaGTCTGTTTCTTGTAC	tcaacatcagtgcttgttgt...	.343...	gtttttaaacag	aagctttg
M. Mus	ctag gttt	gtatagataggt...1358...	gggagaggggaaggtgcct-	gaGTCTGTTTCTTGTAC	tcaacatcagtgcttgttt...	.368...	gtttttaaacag	aagctttg
R. Nor	ctag gttt	gtatagataggt...1837...	gggagaggggaaggtgcc-	gaGTCTGTTTCTTGTAC	tcaacatcagtgcttgttct...	.363...	gtttttaaacag	aagctttg
C. Por	ctag gttt	gtatagataggt...1179...	gggagaggggaaggtacct-	gaGTCTGTTTCTTGTAC	tcaacatcagtgcttgcttt...	.338...	gtttttaaacag	aagctttg
O. Cun	ctag gttt	gtatagataggt...1166...	-ggagaggggaaggtccctc	gaGTCTGTTTCTTGTAC	tcatcatcagtgcttgtttc...	.334...	gtttttaaacag	aagctttg
C. Fam	ctag gttt	gtatagataggt...1222...	gggagaggggaaggtacct-	gaGTCTGTTTCTTGTAC	tcagcatcagtgcttgttt...	.347...	gtttttaaacag	aagctttg
B. Tau	ctag gttt	gtatagataggt...1207...	gggagaggggaagctatct-	gaGTCTGTTTCTTGTAC	tcaacatcagtgcttgttt...	.376...	gtttttaaacag	aagctttg
E. Cab	ctag gttt	gtatagataggt...1227...	gggagaggggaaggtacct-	gaGTCTGTTTCTTGTAC	tcgacatcagtgcttgttt...	.340...	gtttttaaacag	aagctttg
S. Sus	ctag gttt	gtatagataggt...1210...	gggagaggggaaggtacct-	gaGTCTGTTTCTTGTAC	tcaacatcagcgattgttt...	.344...	gtttttaaacag	aagctttg
L. Afr	ctag gttt	gtacagataggt...1181...	gggagaggggaaggtacct-	gaGTCTGTTTCTTGTAC	tcaacattagtgcttgttt...	.351...	gtttttaaacag	aagctttg
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id=495325 gene=ENSG00000100201 name=DDX17 segment=chr22_38886442_38888056_-1 type=AN

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R. Mac	gagattca	ggccatgtcata...591...	aagaccgaggagcctttatt	GTAATAAGAAAACAGAC	ataatg-ccccttcttcacaa-	...182...	accggaaccag	gttctccg
P. Tro	gcgattca	ggccatgtcata...588...	aagaccgaggagcctttatt	GTAATAAGAAAACAGAC	ataatg-ccccttcttcacaa-	...184...	accggaaccag	gttctccg
P. Abe	gagattca	ggccatgtcata...589...	aagaccgaggagcctttatt	GTAATAAGAAAACAGAC	ataatg-ccccttcttcacaa-	...183...	accggaaccag	gttctccg
C. Jac	gagattca	ggccatgtcata...589...	aagaccgaggagcctttatt	GTAATAAGAAAACAGAC	ataaag-ccccttcttcacaa-	...184...	accggaaccag	gttctccg
M. Mus	gagtttca	ggccatggcata...572...	aagactgaggagcctttatt	GTAATAAGAAAACAGAC	ataatg-cccctacttcacat-	...171...	acctgaaccag	gttctccg
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C. Por	gacattta	ggccatgttgta...573...	acgaccgaggagcctttatt	GTAATAAGAAAACAGAC	ataatg-ccccttcttcacaa-	...193...	accggaaccag	gttctccg
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C. Fam	gatatcca	ggccatgtcata...598...	aagactgaggagcctttatt	GTAATAAGAAAACAGAC	ataatgccccttcttcaca--	...188...	accggaaccag	gttctccg
B. Tau	gagattca	ggccatgtcata...593...	aagactgaggagcctttatt	GTAATAAGAAAACAGAC	cataatgccccttcttcaca--	...191...	accggaaccag	gttctccg
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L. Afr	gagattca	ggccatgtctag...597...	aagactgaggagcctttatt	GTAATAAGAAAACAGAC	atgatgccccttcttcacaca--	...187...	accggaaccag	gttctccg
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id=495327 gene=ENSG00000100201 name=DDX17 segment=chr22_38885464_38886317_-1 type=AN VIEW

Figure 266:



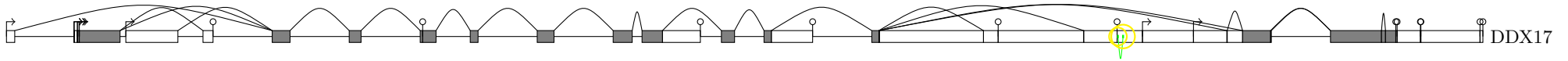
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R.Mac	aaaaatct	gtgtttatcta..94...----	aaatatacattcagctgaaa	GCATTACACTAA	ATTT	--acattt-taagccttaggagg...	36...--aaactt	gtgtct	caaggttt
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R.Nor	agaaatct	gtgtttatcta..93...----	aaaactacatttagctgaaa	GCATTACACTAA	ATTT	gcatactt	tttaagtttagg---	27...--aa	gtgtct
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C.Fam	aaaaatct	gtgtttatcta..95...----	aaataaacatttagctgaaa	GCATTACACTAA	ATTT	acatactt	-taagcattagga---	35...--at	taaaggtct
F.Cat	aaaaatct	gtgtttatcta..95...----	aaatctacatttagctgaaa	GCATTACACTAA	ATTT	acatactt	-gaagcattagga---	38...--aa	actgtgtct
B.Tau	aaaaatct	gtgtttatcta..95...----	aaatatacatttagtgaaa	GCATTACACTAA	ATTT	acatactt	-aaaacttagga---	38...--aa	actgtgtct
E.Cab	aaaaatct	gtgtttatcta..97...----	aaatagacatttagctgaaa	GCATTACACTAA	ATTT	acatactt	-gaagcattagga---	38...--ga	actgtgtct
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M.Mus	gtgtgtct	caaggtttcatg...119...----	ctgggcttggtgtagtagagtg	AAATtTTAGTGAATGT	-----gttctt	---gtgattgaaagggg-----	..193...cttctccaaca	gagtagaa
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C.Fam	aagtgtct	caaggtttcatg...130...----	ctgggcttggttagtagtagtg	AAATtTTAGTGAATGT	-----gctcctt	cggtaatgaaag-----	..224...cttctccaaca	gagtagaa
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Figure 267: CS=4.5



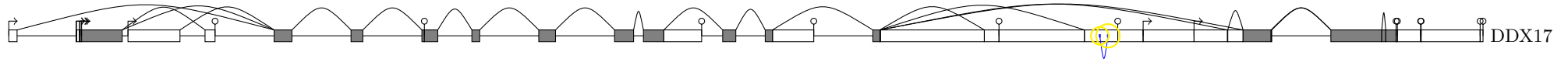
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P. Tro	aAAAAATCT	GTGTTTTAT	ctAGGATATTT	-----	-----	tctgaatattc	tttgtaaaa...	163...	--aaactt	gtgtct	caaggttt		
P. Abe	aAAAAATCT	GTGTTTTAT	ctAGGATATTT	-----	-----	tctgaatattc	tttgtaaaa...	164...	--aaactt	gtgtct	caaggttt		
C. Jac	aAAAAATCT	GTGTTTTAT	ctAGGATATTT	-----	-----	tctgaatattc	tttgtaaaa...	160...	ctaaact-	tgtct	caaggttt		
M. Mus	aGAAATCT	GTGTTTTAT	ctAGGATA	TTTCGGAATA	TCTT	GTAAAAATGCAGATTTTT	ttccacaaaaa	attaggatt-	...	132...	--at	atgtgtct	caaggttt
R. Nor	aGAAATCT	GTGTTTTAT	ctAGGATA	TTTCGGAATA	TCTT	GTAAAAATGCAGATTTTT	ttccacaaaaa	attaggatt-	...	118...	--aat	gtgtct	caaggttt
C. Por	aAAAAATCT	GTGTTTTAT	ctAGGATATTT	-----	-----	tctgaatattc	tttgtaaaa...	161...	--cagatt	gtgcct	caaggttt		
O. Cun	aAAAAATCT	GTGTTTTAT	ctAGGATATTT	-----	-----	tctgaatattc	tttgtaaaa...	155...	--at	caactgtct	caaggttt		
C. Fam	aAAAAATCT	GTGTTTTAT	ctAGGATATTT	-----	-----	tctgaatattc	tttgtaaaa...	159...	--at	aaagtgtct	caaggttt		
F. Cat	aAAAAATCT	GTGTTTTAT	ctAGGATATTT	-----	-----	tctgaatattc	tttgtaaaa...	162...	--aaactt	gtgtct	caaggttt		
B. Tau	aAAAAATCT	GTGTTTTAT	ctAGGtATTT	cGGAAT	tTCTT	GTAAAAATGCAGATTTTT	ttcccaaaa	acattaggattc...	...	131...	--aaactt	gtgtct	caaggttt
E. Cab	aAAAAATCT	GTGTTTTAT	ctAGGATATTT	-----	-----	tctgaatattc	tttgtaaaa...	164...	--gaactt	gtgtct	caaggttt		
S. Sus	aAAAAATCT	GTGTTTTAT	ctAGGATATTT	-----	-----	tctgaatattc	tttgtaaaa...	165...	--aaactt	gtgtct	caaggttt		
L. Afr	aAAAAATCT	GTGTTTTAT	ctAGGATATTT	-----	-----	tctgaatattc	tttgtaaaa...	159...	--aaact	cggtct	caaggttt		
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R. Mac	aaaaatct	gtgtttt	atctaggat	atcttctGAATA	TCTT	GTAAAAATGCAGATTTTT	ttccacaaa	acagtaggattc...	...	127...	--aaactt	gtgtct	caaggttt
P. Tro	aaaaatct	gtgtttt	atctaggat	atcttctGAATA	TCTT	GTAAAAATGCAGATTTTT	ttccacaaa	acagtaggattc...	...	131...	--aaactt	gtgtct	caaggttt
P. Abe	aaaaatct	gtgtttt	atctaggat	atcttctGAATA	TCTT	GTAAAAATGCAGATTTTT	ttccacaaa	acagtaggattc...	...	132...	--aaactt	gtgtct	caaggttt
C. Jac	aaaaatct	gtgtttt	atctaggat	atcttctGAATA	TCTT	GTAAAAATGCAGATTTTT	ttccacaaa	acagtaggattc...	...	128...	ctaaact-	tgtct	caaggttt
M. Mus	aGAAATCT	GTGTTTTAT	ctAGGATATTT	cGGAAT	TCTT	GTAAAAATGCAGATTTTT	ttccacaaa	acagtaggattc...	...	132...	--at	atgtgtct	caaggttt
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E. Cab	aaaaatct	gtgtttt	atctaggat	atcttctGAATA	TCTT	GTAAAAATGCAGATTTTT	ttccacaaa	acagtaggattc...	...	132...	--gaactt	gtgtct	caaggttt
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L. Afr	aaaaatct	gtgtttt	atctaggat	atcttctGAATA	TCTT	GTAAAAATGCAGATTTTT	ttccacaaa	acagtaggattc...	...	127...	--aaact	cggtct	caaggttt
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Figure 268:



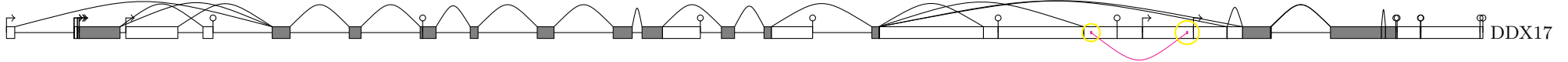
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P. Tro	gaaccag	gttctcggcgc...150...c caaaaataaaaggcaaaga	GACGGGATCg	GCTGc	AGCG	gtttccaaaggaggagga...49...tcacaaaaatct	gtgtttta
P. Abe	gaaccag	gttctcggcgc...150...c caaaaataaaaggcaaaga	GACGGGATCg	GCTGc	AGCG	gtttccaaaggaggagga...49...tcacaaaaatct	gtgtttta
C. Jac	gaaccag	gttctcggcgc...150...c caaaaataaaaggcaaaga	GACGGGATCg	GCTGc	AGCG	gtttccaaaggaggagga...49...tcacaaaaatct	gtgtttta
M. Mus	gaaccag	gttctcggcgc...150...c caaaaataaaaggcaaaga	GACGGGATCg	GCTGc	AGCG	gtttccaaaggaggagga...49...tcacagaaatct	gtgtttta
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C. Por	gaaccag	gttctcggcgc...150...c caaaaataaaaggcaaaga	GACGGGATCg	GCTGc	AGCG	gtttccaaaggaggagga...49...tcacaaaaatct	gtgtttta
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Figure 269:



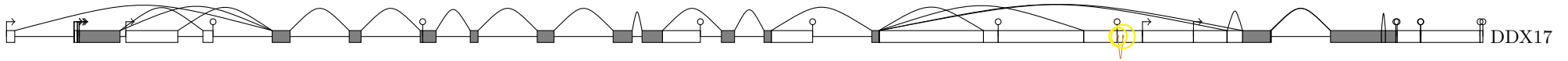
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O. Avi	gaaccag	gttctcggcgcttggcaaccaaatggggctacagag	AAGCATCTAAGCCAGT	TCACAGAGCGAG	cgtgtgtggggacttctcac	----.185..tcacaaaaatct	gtgtttta
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P. Tro	ttgtgtct	caaggtttcatg...322...-----tatgaagctccttttttac	TTTGCTCTGTGACTGGTTT	aaAGGTaaGTTT	ggtatgttgttggtagat	tttgcaggcttctccaaca	gagtagaa
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C. Jac	acttgtct	caaggtttcatg...321...-----atgaagctccttttttac	TTTGCTCTGTGACTGGTTT	aaAGGTaaGTTT	ggtatgttgttggtagat	tttgcaggcttctccaaca	gagtagaa
M. Mus	gtgtgtct	caaggtttcatg...288...-gagtagatgaagtgcttctc	CGTGCTGTGACTGGT	ctgaaggttaagttggtt	gattgttggtagactgtgcaggcttctccaaca		gagtagaa
R. Nor	gtgtgtct	caaggtttcatg...285...-gagtagatggagtaccttctc	CATGTTGCTCTGTGACTGGT	ctgaaggttaagttggtt	gattgttggtagactgtgcaggcttctccaaca		gagtagaa
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O. Avi	ttgtgtct	caaggtttcatg...350...-----ttttgtttttgttttcat	TTTGCTCTGTGACTGGTTT	aaAGGTaaGTTT	ggtatattactgtagat	tttgcaggcttctccaaca	gagtagaa
L. Afr	tcgtgtct	caaggtttcatg...291...aaagcatatgaagctttttt	CGTTTTGCTCTGTGATTGGTTT	aaAGGTaaGTTT	gcatgttactgat	-atttgcaggcttctccaaca	gagtagaa
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Figure 270: CS=4.8



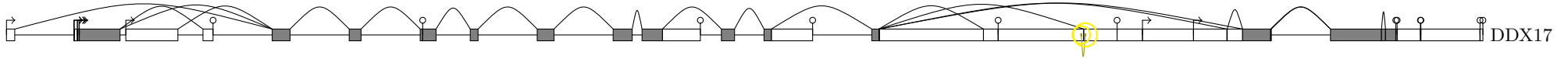
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R. Mac	gaaccag	gttctccggcgc...242...ttttaattatttatcac	AAAAATCT	GTGTTT	a
P. Tro	gaaccag	gttctccggcgc...242...ttttaattatttatcac	AAAAATCT	GTGTTT	a
P. Abe	gaaccag	gttctccggcgc...242...ttttaattatttatcac	AAAAATCT	GTGTTT	a
C. Jac	gaaccag	gttctccggcgc...242...ttttaattatttatcac	AAAAATCT	GTGTTT	a
M. Mus	gaaccag	gttctccggcgc...242...ttttaattatttctatcac	AGAAATCT	GTGTTT	a
R. Nor	gaaccag	gttctccggcgc...242...ttttaattatttctatcac	AGAAATCT	GTGTTT	a
C. Por	gaaccag	gttctccggcgc...242...ttttaattatttctatcac	AAAAATCT	GTGTTT	a
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C. Fam	gaaccag	gttctccggcgc...242...ttttaattatttatcac	AAAAATCT	GTGTTT	a
F. Cat	gaaccag	gttctccggcgc...242...ttttaattatttatcac	AAAAATCT	GTGTTT	a
B. Tau	gaaccag	gttctccggcgc...242...ttttaattatttatcac	AAAAATCT	GTGTTT	a
E. Cab	aaaccag	gttctccggcgc...242...ttttaattatttatcac	AAAAATCT	GTGTTT	a
S. Sus	gaaccag	gttctccggcgc...242...ttttaattatttatcac	AAAAATCT	GTGTTT	a
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id=495328 gene=ENSG0000100201 name=DDX17 segment=chr22.38885182.38885463.-1 type=AN

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R. Mac	aaaaatct	gtgtttatctaggatatttctgaatattctttg	TAAATGCAGATTTTT	-tccacaaaacagtaggattc...	127...--aaacttggtct	caaggttt
P. Tro	aaaaatct	gtgtttatctaggatatttctgaatattctttg	TAAATGCAGATTTTT	-tccacaaaacagtaggattc...	131...--aaacttggtct	caaggttt
P. Abe	aaaaatct	gtgtttatctaggatatttctgaatattctttg	TAAATGCAGATTTTT	-tccacaaaacagtaggattc...	132...--aaacttggtct	caaggttt
C. Jac	aaaaatct	gtgtttatctaggatatttctgaatattctttg	TAAATGCAGATTTTT	-tccacaaaacagtaggattc...	128...ctaaact--tgtct	caaggttt
M. Mus	agaaatct	gtgtttatctaggatatttctgaatattctttg	TAAATGCAGATTTTT	-tccacaaaacagtaggattc...	132...--aatgtgtgtct	caaggttt
R. Nor	agaaatct	gtgtttatctaggatatttctgaatattctttg	TAAATGCAGATTTTT	-tccacaaaacagtaggattc...	118...--aatgtgtgtct	caaggttt
C. Por	aaaaatct	gtgtttatctaggatatttctgaatattctttg	TAAATGCAGATTTTT	-tccacaaaacagtaggattc...	129...--cagattgtgcct	caaggttt
O. Cun	aaaaatct	gtgtttatctaggatatttctgaatattctttg	TAAATGCAGATTTTT	-tccacaaaacagtaggattc...	124...--atcaaacgtgtct	caaggttt
C. Fam	aaaaatct	gtgtttatctaggatatttctgaatattctttg	TAAATGCAGATTTTT	-tccacaaaacagtaggattc...	127...--attaagtgtct	caaggttt
F. Cat	aaaaatct	gtgtttatctaggatatttctgaatattctttg	TAAATGCAGATTTTT	-tccacaaaacagtaggattc...	130...--aaacttggtct	caaggttt
B. Tau	aaaaatct	gtgtttatctaggatatttctgaatattctttg	TAAATGCAGATTTTT	-tccacaaaacagtaggattc...	130...--aaacttggtct	caaggttt
E. Cab	aaaaatct	gtgtttatctaggatatttctgaatattctttg	TAAATGCAGATTTTT	-tccacaaaacagtaggattc...	132...--gaacttggtct	caaggttt
S. Sus	aaaaatct	gtgtttatctaggatatttctgaatattctttg	TAAATGCAGATTTTT	-tccacaaaacagtaggattc...	133...--aaacttggtct	caaggttt
L. Afr	aaaaatct	gtgtttatctaggatatttctgaatattctttg	TAAATGCAGATTTTT	-tccacaaaacagtaggattc...	127...--aaacttggtct	caaggttt
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id=495329 gene=ENSG0000100201 name=DDX17 segment=chr22.38884967.38885181.-1 type=AN VIEW

Figure 271:



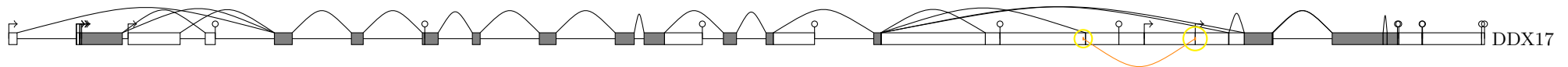
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M. Mus	gagtttca	ggccatggcata...754...tcacccaatta-ccttggggg	AGGCGTTGGAGGACCTG	aaatttttacctgaaccag	gttctccg
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C. Por	gacattta	ggccatgttcta...777...-caccgaatta-ccttggggg	AGGCGTTGGAGGACCTG	aaatttttaccggaaccag	gttctccg
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P. Tro	gaaccCAG	GTTCTCCGGCGCTT	ggcaaccaaaggggctaca...236...tcacaaaaatct	gtgtttta
P. Abe	gaaccCAG	GTTCTCCGGCGCTT	ggcaaccaaaggggctaca...236...tcacaaaaatct	gtgtttta
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M. Mus	gaaccCAG	GTTCTCCGGCGCTT	ggcaaccaaaggggctaca...236...tcacagaaatct	gtgtttta
R. Nor	gaaccCAG	GTTCTCCGGCGCTT	ggcaaccaaaggggctaca...236...tcacagaaatct	gtgtttta
C. Por	gaaccCAG	GTTCTCCGGCGCTT	ggcaaccaaaggggctaca...236...tcacaaaaatct	gtgtttta
O. Cun	gaaccCAG	GTTCTCCGGCGC	atggcaaccaaaggggcta--...238...tcacaaaaatct	gtgtttta
C. Fam	gaaccCAG	GTTCTCCGGCGCTT	ggcaaccaaaggggctaca...236...tcacaaaaatct	gtgtttta
B. Tau	gaaccCAG	GTTCTCCGGCGCTT	ggcaaccaaaggggctaca...236...tcacaaaaatct	gtgtttta
E. Cab	aaaccCAG	GTTCTCCGGCGCTT	ggcaaccaaaggggctaca...236...tcacaaaaatct	gtgtttta
S. Sus	gaaccCAG	GTTCTCCGGCGCTT	ggcaaccaaaggggctaca...236...tcacaaaaatct	gtgtttta
O. Avi	gaaccCAG	GTTCTCCGGCGCTT	ggcaaccaaaggggctaca...236...tcacaaaaatct	gtgtttta
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Figure 272:



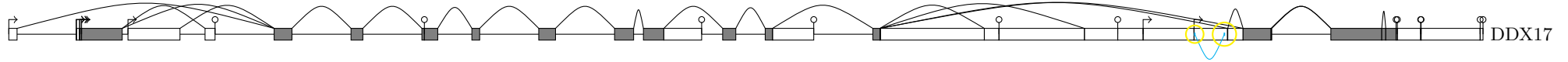
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P.Tro	gogattca	ggccatgtcata...787...--caattatccttgggggaggc	GTTGGAGGACCTG	aaatTTTTaccgaaccag	gttctccg
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E.Cab	gagattca	ggccatgtcata...797...--caattatccttgggggaggc	GTTGGAGGACCTG	aaatTTTTaccgaaccag	gttctccg
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L.Afr	gagattca	ggccatgtctag...799...--caattatccttgggggaggc	GTTGGAGGACCTG	aaatTTTTaccgaaccag	gttctccg
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P.Tro	ttgtgtct	caaggtttcatg...376...--atgttgttgtagattttgc	-----	CAGGcTTCTc	CCAACa	gagtagaa
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R.Nor	gtgtgtct	caaggtttcatg...342...--gtattgttgtagactgtgc	-----	CAGGcTTCTc	CCAACa	gagtagaa
C.Por	ttgtgcct	caaggtttcatg...352...--atgttttcggttagattttgc	-----	CAGGcTTCTc	CCAACa	gagtagaa
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S.Sus	ttgtgtct	caaggtttcatg...367...--atattactgtagattttgc	-----	CAGGcTTCTc	CCAACa	gagtagaa
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Figure 273: CS=4.5



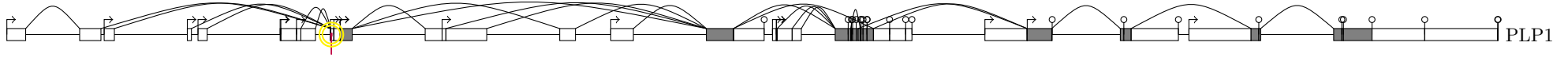
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F.Cat	tCCCAACA	GAGTAGAAGtGATT	taattgatctttagctta-----218...tcctgttcagaa	tggttact
B.Tau	tCCCAACA	GAGTAGAAGtGATT	tggcctttagcttaaatggt...204...tcctgttcagag	tggttact
E.Cab	tCCCAACA	GAGTAGAAGtGATT	tggccttgaagttaacggt...217...tcctatgcagag	tggttact
S.Sus	tCCCAACA	GAGTAGAAGtGATT	tggccttgaaccacacctt...203...tcctgttcagag	tggttact
O.Avi	tCCCAACA	GAGTAGAAGtGATT	tggcctttagcttaaatggt...204...tcctgttcagag	tggttact
L.Afr	tCCCAACA	GAGTAgagtgttggccttgtaa-----248...ttctgttcagag	tggttact	
*****	*****	**** * **	*****	*** * **

id=495331 gene=ENSG00000100201 name=DDX17 segment=chr22.38884253.38884535.-1 type=AN

H.Sap	tcccaaca	gagtagaagtga...201...--tgc	atgtccagggaatcaggt---AATCct	CTTTTACTCTGTTGGGA	tgagtc-ttttttgtttctgttcagag	tggttact
R.Mac	tcccaaca	gagtagaagtga...200...-atg	catgtccttaggaatcgg---TAATCct	CTTTTACTCTGTTGGGA	tgagtc-ttttttgtttctgttcagag	tggttact
P.Tro	tcccaaca	gagtagaagtga...201...--tgc	atgtccagggaatcaggt---AATCct	CTTTTACTCTGTTGGGA	tgagtc-ttttttgtttctgttcagag	tggttact
P.Abe	tcccaaca	gagtagaagtga...201...--tgc	atgtccagggaatcaggt---AATCct	CTTTTACTCTGTTGGGA	tgagtc-ttttttgtttctgttcagag	tggttact
C.Jac	tcccaaca	gagtagaagtga...199...c	catgtccttaggaatcaggt---AGTCct	CTTTTACTCTGTTGGGA	tgagtc-tcctttgtttctgttcagag	tggttact
M.Mus	tcccaaca	gagtagaagtga...195...--c	ctgtgtcctgagtgacct---GATCct	CTTTTACTCTGTTGGGA	tgagtc-ttttttgtttctgttcagag	tggttact
R.Nor	tcccaaca	gagtagaagtga...194...--t	gtgtgtcctgcacggcact---GATCCTCct	TTTACTCTGTTGGGA	tgagtc-ttctttgtttctgttcagag	tggttact
C.Por	tcccaaca	gagtagaagtga...198...--t	acatacctcaagaacct---AATCct	CTTACTCTGTTGGGA	tgagtc-ttttttgtttctgttcagag	tggttact
O.Cun	tcccaaca	gagtagaagtga...177...--t	gtccagggaacctaatc---AATCct	CTTTTACTCTGTTGGGA	tgagtc-ttgtttgtttctgttcagag	cggttact
C.Fam	tcccaaca	gagtagaagtaa...186...--t	ccaagaatcattcatcct---CTTTTACTCTGTTGGGA	tgagtc-ttttttgtttctgttcagag	tggttact	
F.Cat	tcccaaca	gagtagaagtaa...183...--t	ccaagaatcagtaatcct---CTTTTACTCTGTTGGGA	tgagtc-ttttttgtttctgttcagaa	tggttact	
B.Tau	tcccaaca	gagtagaagtga...169...--c	tgatgtccaagcatcatt---AATCct	CTTTTACTCTGTTGGGA	tgagtc-ttttttgtttctgttcagag	tggttact
E.Cab	tcccaaca	gagtagaagtga...181...--t	gatgtccaagaatcatt---AATCct	CTTTTACTCTGTTGGGA	tgagtc-ttttttgtttctgttcagag	tggttact
S.Sus	tcccaaca	gagtagaagtga...167...--t	gatgtccaagcatcatt---AATCct	CTTTTACTCTGTTGGGA	tgagtc-ttttttgtttctgttcagag	tggttact
O.Avi	tcccaaca	gagtagaagtga...169...--t	gatgtccaagcatcatt---AATCct	CTTTTACTCTGTTGGGA	tgagtc-ttttttgtttctgttcagag	tggttact
L.Afr	tcccaaca	gagtagaagtga...213...--c	agaatcactaatcctctg---TACTCTGTTGGGA	tgagtc-ttttttgtttctgttcagag	tggttact	
*****	*****	**** * *	*	*****	*****	*** * **

id=495331 gene=ENSG00000100201 name=DDX17 segment=chr22.38884253.38884535.-1 type=AN VIEW

Figure 274: CS=15.36



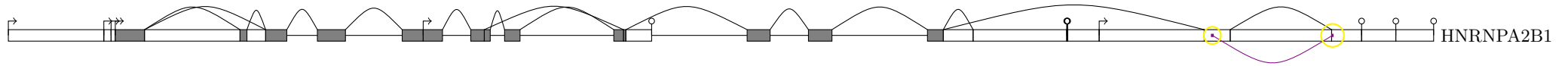
H.Sap	atccctga	gtaggtggggaa...60...tggctgtcaatcagaaagcc	CTTTTCaTTG	CAGGAGAA
P.Tro	atccctga	ggaggtggggaa...61...tggctgtcaatcagaaagcc	CTTTTCaTTG	CAGGAGAA
P.Abe	atccctga	ggaggtggggaa...61...tggctgtcaatcagaaagcc	CTTTTCaTTG	CAGGAGAA
C.Jac	atccctga	ggaggtggggac...61...tggctgtcaatcagaaagcc	CTTTTCaTTG	CAAGAGAA
M.Mus	atcccaaa	ggaggtggggac...61...tggctgtcaatcagaaagcc	CTTTTCaTTG	CAGGAGAA
R.Nor	atcccaaa	ggaggtggggac...61...tggctgtcaatcagaaagcc	CTTTTCaTTG	CAGGAGAA
C.Por	ctccctaa	ggaggtggggac...64...tggctgtcaatcagaaagcc	CTTTTCaTTG	CAGGAGAA
O.Cun	atccctga	ggaggtggggac...61...tggctgtcaatcagaaagcc	CTTTTCaTTG	CAGGAGAA
C.Fam	atccctaa	ggaggtggggac...61...tggctgtcaatcagaaagcc	CTTTTCaTTG	CAGGAGAA
F.Cat	atccctaa	ggaggtggggac...62...tggctgtcaatcagaaagcc	CTTTTCaTTG	CAGGAGAA
B.Tau	tatcctca	ggaggtggggac...61...tggctgtcaatcagaaagcc	CTTTTCaTTG	CAGGAGAA
E.Cab	atccctga	ggaggtgggaac...61...tggctgtcaatcagaaagcc	CTTTTCaTTG	CAGGAGAA
S.Sus	attccoga	ggaggtggggac...62...tggctgtcaatcagaaagcc	CTTTTCaTTG	CAGGAGAA
O.Avi	tatcctga	ggaggtggggac...61...tggctgtcaatcagaaagcc	CTTTTCaTTG	CAGGAGAA
L.Afr	atccctga	ggaggtggggac...61...tggctgtcaatcagaaagcc	CTTTTCaTTG	CAGGAGAA
	** *	*****	** *****	** *****

id=629872 gene=ENSG00000123560 name=PLP1 segment=chrX.103031676_103031777_1 type=I5

H.Sap	tTTCaTTG	CAGGAGAAGag
P.Tro	tTTCaTTG	CAGGAGAAGag
P.Abe	tTTCaTTG	CAGGAGAAGag
C.Jac	tTTCaTTG	CAAGAGAAGag
M.Mus	tTTCaTTG	CAGGAGAAGag
R.Nor	tTTCaTTG	CAGGAGAAGag
C.Por	tTTCaTTG	CAGGAGAAGag
O.Cun	tTTCaTTG	CAGGAGAAGag
C.Fam	tTTCaTTG	CAGGAGAAGag
F.Cat	tTTCaTTG	CAGGAGAAGag
B.Tau	tTTCaTTG	CAGGAGAAGag
E.Cab	tTTCaTTG	CAGGAGAAGag
S.Sus	tTTCaTTG	CAGGAGAAGag
O.Avi	tTTCaTTG	CAGGAGAAGag
L.Afr	tTTCaTTG	CAGGAGAAGag
	*****	** *****

id=629873 gene=ENSG00000123560 name=PLP1 segment=chrX.103031778_103031780_1 type=A5 VIEW

Figure 275:



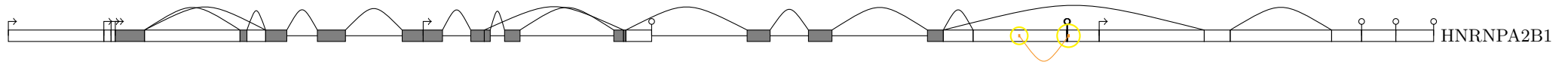
H.Sap	aatttttag	cattgatatgaacctggacaagtataTTCTgcTGCCacAAAG-actgtaaagtgcttcatttc-...61...ggtagtaaaatg	gtaggtaa
R.Mac	aatttttag	cattgatatgaacctggacaagtataTTCTgcTGCCacAAAG-actgtaaagtgcttcatttc-...61...ggtagtaaaatg	gtaggtaa
P.Tro	aatttttag	cattgatatgaacctggacaagtataTTCTgcTGCCacAAAG-actgtaaagtgcttcatttc-...61...ggtagtaaaatg	gtaggtaa
P.Abe	aatttttag	cattgatatgaacctggacaagtataTTCTgcTGCCacAAAG-actgtaaagtgcttcatttc-...61...ggtagtaaaatg	gtaggtaa
C.Jac	aatttttag	cattgatatgagccatggacaagtataTTCTgcTGCCacAAAG-actgtaaagtgcttcatttc-...61...ggtagtaaaatg	gtaggtaa
M.Mus	aatttttag	cattgatatgaacctggacaagtataTTCTgcTGCCacAAAG-actgtaaagtgcttcatttc-...61...ggtagtaaaatg	gtaggtaa
R.Nor	aatttttag	cattgatatgaacctggacaagtataTTCTgcTGCCacAAAG-actgtaaagtgcttcatttc-...61...ggtagtaaaatg	gtaggtaa
C.Por	aatttttag	cattgatatgaacctggacaagtataTTCTgcTGCCacAAAG-actgtaaagtgcttcatttc-...61...ggtagtaaaatg	gtaggtaa
O.Cun	aatttttag	cattgatatgaacctggacaagtataTTCTgcTGCCacAAAG-actgtaaagtgcttcatttc-...61...ggtagtaaaatg	gtaggtaa
C.Fam	aatttttag	cattgctatgaacctggacacgtataTTCTgcTGCCacAAAG-actgtaaagtgcttcatttc-...63...ggtagtaaaatg	gtaggtaa
B.Tau	aatttttag	cattgatatgaacctggacaagtataTTCTgcTGCCacAAAG-actgtaaagtgcttcatttc-...61...ggtagtaaaatg	gtaggtaa
E.Cab	aatttttag	caatgatatgaacctggacaagtataTTCTgcTGCCacAAAG-actgtaaagtgcttcatttc-...61...ggtagtaaaatg	gtaggtaa
L.Afr	aatttttag	cattgatatgaacctggacaagtataTTCTgcTGCCacAAAGGA-actgtaaagtcttcatttc-...60...ggtagtaaaatg	gtaggtaa
*****	** ** *	*****	*****

id=536504 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26230613_26230748_-1 type=EN

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R.Mac	gtaaaatg	gtaggtaaaagt...490...--cttcagatacttttttttcCTTTGGCAG	GAA	ggtgt
P.Tro	gtaaaatg	gtaggtaaaagt...494...--cttcagatacttttttttcCTTTGGCAG	GAA	ggtgt
P.Abe	gtaaaatg	gtaggtaaaagt...499...--cttcagatacttttttttcCTTTGGCAG	GAA	ggtgt
C.Jac	gtaaaatg	gtaggtaaaagt...486...--cttcagataaatttttttttcCTTTGGCAG	GAA	ggtgt
M.Mus	gtaaaatg	gtaggtaaaagt...445...--cttcagatacttttttttttcCTTTGGCAG	GAA	ggtgt
R.Nor	gtaaaatg	gtaggtaaaagt...450...--cttcagatacttttttttttcCTTTGGCAG	GAA	ggtgt
C.Por	gtaaaatg	gtaggtaaaagt...477...--cttcagatacttttttttttcCTTTGGCAG	GAA	ggtgt
O.Cun	gtaaaatg	gtaggtaaaagt...504...--cttcagatacttttttttttcCTTTGGCAG	GAA	ggtgt
C.Fam	gtaaaatg	gtaggtaaaagt...510...--cttcagatacttttttttttcCTTTGGCAG	GAA	ggtgt
B.Tau	gtaaaatg	gtaggtaaaagt...506...--cttcagatacttttttttttcCTTTGGCAG	GAA	ggtgt
E.Cab	gtaaaatg	gtaggtaaaagt...521...--cttcagatacttttttttttcCTTTGGCAG	GAA	ggtgt
L.Afr	gtaaaatg	gtaggtaaaagt...514...ttcttcagatacttttttttTCCTTTGGCAG	GAA	ggtgt
*****	*****	*****	*****	*****

id=536505 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26230081_26230612_-1 type=AN VIEW

Figure 276: CS=7.8



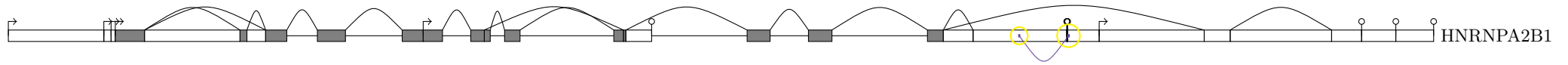
H.Sap	tgaaacag	gcttcactgtat...196...taaaaaaaaaatgcctttgag	ACAGTTTCTTAG	ctttttaattgttgtttcctt-...218...aataattctaaa	ggaaattg
R.Mac	tgaaacag	gcttcactgtat...197...aaaaaaaaaatgcctttgag	ACAGTTTCTTAG	ctttttaattgttgtttcctt-...217...aataattctaaa	ggaaattg
P.Tro	tgaaacag	gcttcactgtat...198...aaaaaaaaaatgcctttgag	ACAGTTTCTTAG	ctttttaattgttgtttcctt-...217...aataattctaaa	ggaaattg
P.Abe	tgaaacag	gcttcactgtat...197...aaaaaaaaaatgcctttgag	ACAGTTTCTTAG	ctttttaattgttgtttcctt-...217...aataattctaaa	ggaaattg
C.Jac	tgaaacag	gcttcactgtat...201...aaaaaaaaaatgcctttgag	ACAGTTTCTTAG	ctttttaattgttgtttcctt-...218...aataattctaaa	ggaaattg
M.Mus	tgaaacag	gcttcactgtat...196...aaaaaaaaaatgcctttgag	ACAGTTTCTTAG	ctttttaattgttgtttcctt-...218...aataattctaaa	ggaaattg
R.Nor	tgaaacag	gcttcactgtat...190...taaaaaaaaaatgcctttgag	ACAGTTTCTTAG	ctttttaattgttgtttcctt-...218...aataattctaaa	ggaaattg
C.Por	tgaaacag	gcttcactgtat...194...tgtaaaaaaatgcctttgag	ACAGTTTCTTAG	ctttttaattgttgtttcctt-...217...aataattctaaa	ggaaattg
O.Cun	tgaaacag	gcttcactgtat...199...aaaaaaaaaatgcctttgag	ACAGTTTCTTAG	ctttttaattgttgtttcctt-...216...ataaattctaaa	ggaaattg
C.Fam	tgaaacag	gcttcactgtat...197...aaaaaaaaaatgcctttgag	ACAGTTTCTTAG	ctttttaattgttgtttcctt-...218...aataattctaaa	ggaaattg
B.Tau	tgaaacag	gcttcactgtat...195...gtaaaaaaatgcctttgag	ACAGTTTCTTAG	ctttttaattgttgtttcctt-...218...aataattctaaa	ggaaattg
E.Cab	tgaaacag	gcttcactgtat...198...aaaaaaaaaatgcctttgag	ACAGTTTCTTAG	ctttttaattgttgtttcctt-...218...aataattctaaa	ggaaattg
L.Afr	tgaaacag	gcttcactgtat...198...aaaaaaaaaatgcctttgag	ACAGTTTCTTAG	ctttttt-attgttgtttcctt...215...aataattctaaa	ggaaattg
*****	*****	*****	*****	*****	*****

id=536499 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26231469_26231958_-1 type=AN

H.Sap	tCTAAa	GG	AAaTTGT	gtaa
R.Mac	tCTAAa	GG	AAaTTGT	gtaa
P.Tro	tCTAAa	GG	AAaTTGT	gtaa
P.Abe	tCTAAa	GG	AAaTTGT	gtaa
C.Jac	tCTAAa	GG	AAaTTGT	gtaa
M.Mus	tCTAAa	GG	AAaTTGT	gtaa
R.Nor	tCTAAa	GG	AAaTTGT	gtaa
C.Por	tCTAAa	GG	AAaTTGT	gtaa
O.Cun	tCTAAa	GG	AAaTTGT	gtaa
C.Fam	tCTAAa	GG	AAaTTGT	gtaa
B.Tau	tCTAAa	GG	AAaTTGT	gtaa
E.Cab	tCTAAa	GG	AAaTTGT	gtaa
L.Afr	tCTAAa	GG	AAaTTGT	gtaa
*****	**	*****	*****	*****

id=536501 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26231464_26231466_-1 type=AN VIEW

Figure 277:



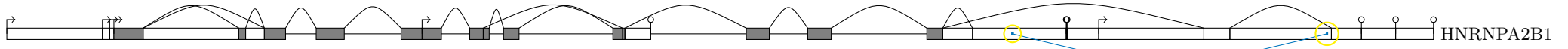
H. Sap	tgaacag	gcttca	ctgtat...196...taaaaaaa	atgcctttgag	ACAGTTTCTTAG	cttttaattg	tgtttctt-...218...aataattctaaa	ggaaattg
R. Mac	tgaacag	gcttca	ctgtat...197...aaaaaaa	atgcctttgag	ACAGTTTCTTAG	cttttaattg	tgtttctt-...217...aataattctaaa	ggaaattg
P. Tro	tgaacag	gcttca	ctgtat...198...aaaaaaa	atgcctttgag	ACAGTTTCTTAG	cttttaattg	tgtttctt-...217...aataattctaaa	ggaaattg
P. Abe	tgaacag	gcttca	ctgtat...197...aaaaaaa	atgcctttgag	ACAGTTTCTTAG	cttttaattg	tgtttctt-...217...aataattctaaa	ggaaattg
C. Jac	tgaacag	gcttca	ctgtat...201...aaaaaaa	atgcctttgag	ACAGTTTCTTAG	cttttaattg	tgtttctt-...218...aataattctaaa	ggaaattg
M. Mus	tgaacag	gcttca	ctgtat...196...taaaaaaa	atgcctttgag	ACAGTTTCTTAG	cttttaattg	tgtttctt-...218...aataattctaaa	ggaaattg
R. Nor	tgaacag	gcttca	ctgtat...190...taaaaaaa	atgcctttgag	ACAGTTTCTTAG	cttttaattg	tgtttctt-...218...aataattctaaa	ggaaattg
C. Por	tgaacag	gcttca	ctgtat...194...tgtaaaaa	atgcctttgag	ACAGTTTCTTAG	cttttaattg	tgtttctt-...217...aataattctaaa	ggaaattg
O. Cun	tgaacag	gcttca	ctgtat...199...aaaaaaa	atgcctttgag	ACAGTTTCTTAG	cttttaattg	tgtttctt-...216...ataaattctaaa	ggaaattg
C. Fam	tgaacag	gcttca	ctgtat...197...aaaaaaa	atgcctttgag	ACAGTTTCTTAG	cttttaattg	tgtttctt-...218...aataattctaaa	ggaaattg
B. Tau	tgaacag	gcttca	ctgtat...195...gtaaaaa	atgcctttgag	ACAGTTTCTTAG	cttttaattg	tgtttctt-...218...aataattctaaa	ggaaattg
E. Cab	tgaacag	gcttca	ctgtat...198...aaaaaaa	atgcctttgag	ACAGTTTCTTAG	cttttaattg	tgtttctt-...218...aataattctaaa	ggaaattg
L. Afr	tgaacag	gcttca	ctgtat...198...aaaaaaa	atgcctttgag	ACAGTTTCTTAG	ctttt-attg	tgtttctt...215...aataattctaaa	ggaaattg
*****	*****	*****	*****	*****	*****	*****	* *****	*****

id=536499 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26231469_26231958_-1 type=AN

H. Sap	attCTAAa	GGAAaTTGTg
R. Mac	attCTAAa	GGAAaTTGTg
P. Tro	attCTAAa	GGAAaTTGTg
P. Abe	attCTAAa	GGAAaTTGTg
C. Jac	attCTAAa	GGAAaTTGTg
M. Mus	attCTAAa	GGAAaTTGTg
R. Nor	attCTAAa	GGAAaTTGTg
C. Por	attCTAAa	GGAAaTTGTg
O. Cun	attCTAAa	GGAAaTTGTg
C. Fam	attCTAAa	GGAAaTTGTg
B. Tau	attCTAAa	GGAAaTTGTg
E. Cab	attCTAAa	GGAAaTTGTg
L. Afr	attCTAAa	GGAAaTTGTg
*****	*****	*****

id=536500 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26231467_26231468_-1 type=AN VIEW

Figure 278:



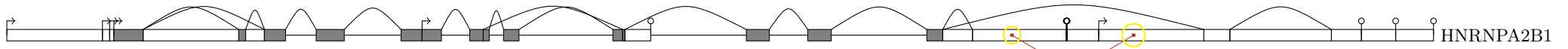
H. Sap	tgaaacag	gcttcactgtat...162...--ttaataacattaccttactg	TGGAgGAAGgaTTGT	-----aaaaaaaaaatgcctttgaga--...249...aataattctaaa	ggaaattg
R. Mac	tgaaacag	gcttcactgtat...162...--ttaataacattaccttactg	TGGAgGAAGgaTTGT	-----aaaaaaaaaatgcctttgag---...249...aataattctaaa	ggaaattg
P. Tro	tgaaacag	gcttcactgtat...162...--ttaataacattaccttactg	TGGAgGAAGgaTTGT	-----aaaaaaaaaatgcctttga---...250...aataattctaaa	ggaaattg
P. Abe	tgaaacag	gcttcactgtat...162...--ttaataacattaccttactg	TGGAgGAAGgaTTGT	-----aaaaaaaaaatgcctttgag---...249...aataattctaaa	ggaaattg
C. Jac	tgaaacag	gcttcactgtat...162...--ttaataacattaccttactg	TGGAgGAAGgaTTGT	aaaaaaaaaaaaaatgcctt-----...254...aataattctaaa	ggaaattg
M. Mus	tgaaacag	gcttcactgtat...162...--ttaataacattaccttactg	TGGAgGAAGgaTTGT	-----aaaaaaaaaatgcctttgaga--...249...aataattctaaa	ggaaattg
R. Nor	tgaaacag	gcttcactgtat...156...gattatt--taataccttactg	TGGAgGAAGgaTTGT	-----aaaaaaaaaatgcctttgaga--...249...aataattctaaa	ggaaattg
C. Por	tgaaacag	gcttcactgtat...162...--ttaataacattaccttactg	TGGAgGAAGgaTTGT	-----aaaaaaaaaatgcctttgagaca...246...aataattctaaa	ggaaattg
O. Cun	tgaaacag	gcttcactgtat...163...--ttaataacattaccttactg	TGGAgGAAGgaTTGT	-----aaaaaaaaaatgcctttga---...249...ataaattctaaa	ggaaattg
C. Fam	tgaaacag	gcttcactgtat...162...--ttaataacattaccttactg	TGGAgGAAGgaTTGT	-----aaaaaaaaaatgcctttgag---...250...aataattctaaa	ggaaattg
B. Tau	tgaaacag	gcttcactgtat...162...--ttaataacattaccttactg	TGGAgGAAGgaTTGT	-----aaaaaaaaaatgcctttgagac...248...aataattctaaa	ggaaattg
E. Cab	tgaaacag	gcttcactgtat...160...--ttaataacattaccttactg	TGGAgGAAGgaTTGT	aaaaaaaaaaaaaatgcctt-----...253...aataattctaaa	ggaaattg
L. Afr	tgaaacag	gcttcactgtat...162...--ttaataacattaccttactg	TGGAgGAAGgaTTGT	-----aaaaaaaaaatgcctttga---...248...aataattctaaa	ggaaattg
	*****	*****	*** * * *****	*****	* *****

id=536499 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26231469_26231958_-1 type=AN

H. Sap	gtaaaatg	gtaggtaaaagt...463...ggttcttttgacacaaatg	ATAAACTTCTTCA	gatacttttttttcctttggcag	gaaggtgt
R. Mac	gtaaaatg	gtaggtaaaagt...462...ggttcttttgacacaaatg	ATAAACTTCTTCA	gatacttttttttcctttggcag	gaaggtgt
P. Tro	gtaaaatg	gtaggtaaaagt...466...ggttcttttgacacaaatg	ATAAACTTCTTCA	gatacttttttttcctttggcag	gaaggtgt
P. Abe	gtaaaatg	gtaggtaaaagt...471...ggttcttttgacacaaatg	ATAAACTTCTTCA	gatacttttttttcctttggcag	gaaggtgt
C. Jac	gtaaaatg	gtaggtaaaagt...458...ggttcttttgacacaaatg	ATAAACTTCTTCA	gataattttttttcctttggcag	gaaggtgt
M. Mus	gtaaaatg	gtaggtaaaagt...417...aggttctgtggacacaaatg	ATAAACTTCTTCA	gatacttttttttcctttggcag	gaaggtgt
R. Nor	gtaaaatg	gtaggtaaaagt...422...aggttcttttgacacaaatg	ATAAACTTCTTCA	gatacttttttttcctttggcag	gaaggtgt
C. Por	gtaaaatg	gtaggtaaaagt...449...aggttcttttgacacaaatg	ATAAACTTCTTCA	gatacttttttttcctttggcag	gaaggtgt
O. Cun	gtaaaatg	gtaggtaaaagt...476...aggttcttttgacacaaatg	ATAAACTTCTTCA	gatacttttttttcctttggcag	gaaggtgt
C. Fam	gtaaaatg	gtaggtaaaagt...482...aggttcttttgacacaaatg	ATAAACTTCTTCA	gatacttttttttcctttggcag	gaaggtgt
B. Tau	gtaaaatg	gtaggtaaaagt...478...aggttcttttgacacaaatg	ATAAACTTCTTCA	gatacttttttttcctttggcag	gaaggtgt
E. Cab	gtaaaatg	gtaggtaaaagt...493...aggttcttttgacacaaatg	ATAAACTTCTTCA	gatacttttttttcctttggcag	gaaggtgt
L. Afr	gtaaaatg	gtaggtaaaagt...488...aggctcttcaacaaatg	ATAAACTTCTTCA	gatacttttttttcctttggcag	gaaggtgt
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id=536505 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26230081_26230612_-1 type=AN VIEW

Figure 279: CS=7.8



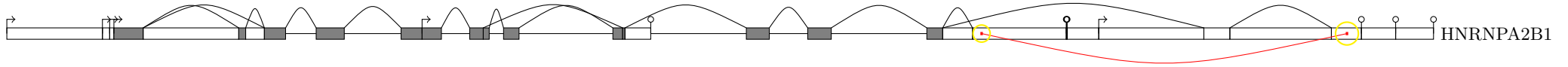
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R. Mac	tgaaacag	gcttcactgat...156...-----gattat	tttaataacattacc	TTACTGTGGag	GAAGga	TTGTA	-----aaaaaaaatgcctttgaga---...248...aataattctaaa	ggaaattg	
P. Tro	tgaaacag	gcttcactgat...156...-----gattat	tttaataacattacc	TTACTGTGGag	GAAGga	TTGTA	-----aaaaaaaatgcctttgag---...249...aataattctaaa	ggaaattg	
P. Abe	tgaaacag	gcttcactgat...156...-----gattat	tttaataacattacc	TTACTGTGGag	GAAGga	TTGTA	-----aaaaaaaatgcctttgaga---...248...aataattctaaa	ggaaattg	
C. Jac	tgaaacag	gcttcactgat...156...-----gattat	tttaataacattacc	TTACTGTGGag	GAAGga	TTGTA	aaaaaaaaaaaaatgccttt-----...253...aataattctaaa	ggaaattg	
M. Mus	tgaaacag	gcttcactgat...150...ggattggattat	tttaataac	ATTAcc	TTACTGTGGag	GAAGga	TTGTA	-----aaaaaaaatgcctttgagac--...248...aataattctaaa	ggaaattg
R. Nor	tgaaacag	gcttcactgat...150...ggattggattat	tttaataac	TTACTGTGGag	GAAGga	TTGTA	-----aaaaaaaatgcctttgagac--...248...aataattctaaa	ggaaattg	
C. Por	tgaaacag	gcttcactgat...156...-----gattat	tttaataacattacc	TTACTGTGGag	GAAGga	TTGTA	-----aaaaaatgcctttgagacag...245...aataattctaaa	ggaaattg	
O. Cun	tgaaacag	gcttcactgat...157...-----gattat	tttaataacattacc	TTACTGTGGag	GAAGga	TTGTA	-----aaaaaaaatgcctttgag---...248...ataaattctaaa	ggaaattg	
C. Fam	tgaaacag	gcttcactgat...156...-----gattat	tttaataacattacc	TTACTGTGGag	GAAGga	TTGTA	-----aaaaaaaatgcctttgaga---...249...aataattctaaa	ggaaattg	
B. Tau	tgaaacag	gcttcactgat...156...-----gattat	tttaataacattacc	TTACTGTGGag	GAAGga	TTGTA	-----aaaaaatgcctttgagaca-...247...aataattctaaa	ggaaattg	
E. Cab	tgaaacag	gcttcactgat...154...-----gattat	tttaataacattacc	TTACTGTGGag	GAAGga	TTGTA	-----aaaaaaaatgcctttg---...252...aataattctaaa	ggaaattg	
L. Afr	tgaaacag	gcttcactgat...163...-----taataacattac	cttactgt	GGAGGAAG	GATTG	-----taaaaaaaaatgcctttg---...249...aataattctaaa	ggaaattg		
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id=536499 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26231469_26231958_-1 type=AN

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R. Mac	taagggat	atctctgcaagg...132...ttaaaaaactgtgctgtttc	TACAAaa	CTTTaa	CTACAGTAG	tttataaggatgccaacgaa-----...332...ctggaattttag	cattgata	
P. Tro	taagggat	atctctgcaagg...132...ttaaaaaactgtgctgtttc	TACAAaa	CTTTaa	CTACAGTAG	tttataaggatgccaacgaa-----...332...cgggaattttag	cattgata	
P. Abe	taagggat	atctctgcaagg...132...ttaaaaaactgtgctgtttc	TACAAaa	CTTTaa	CTACAGTAG	tttataaggatgccaacgaa-----...332...ctggaattttag	cattgata	
C. Jac	taagggat	atctctgcaagg...132...ttaaaaaactgtgctgtttc	TACAAaa	CTTTaa	CTACAGTAG	tttataaggatgccaacgaa-----...324...ctggaattttag	cattgata	
M. Mus	taagggat	atctctgcaaag...129...ttaaaaaactgtgctgtatc	TACAAag	CTTTaa	CTACAGTAGt	FGAT	aaggatgccaacgaaagctg...317...ctggaattttag	cattgata
R. Nor	taagggat	atctctgcaagg...129...ttaaaaaactgtgctgtatc	TACAAag	CTTTaa	CTACAGTAG	ttgataaagatgccaacgag-----...325...ctggaattttag	cattgata	
C. Por	taagggat	atctctgcaagg...132...ttaagaactgtgctgtttc	TACAAag	CTTTaa	CTACAGTAG	tttataaggatgccaacgaa-----...336...ctggaattttag	cattgata	
O. Cun	taagggat	atctctgcaagg...132...ttaaaaaactgtgctgtttc	TACAAag	CTTTaa	CTACAGTAG	tttataaggatgccaacgaa-----...334...ctggaattttag	cattgata	
C. Fam	taagggat	atctctgcaaag...132...ttaaaaaactgcgctgtttc	TACAAag	CTTTaa	CTACAGTAG	tttataaggatgacaacgaa-----...337...ctggaattttag	cattgata	
B. Tau	taagggat	atctctgcaagg...134...ttaaaaaactgtgctgtttc	TACAAag	CTTTaa	CTACAGTAG	tttataaggatgccaacgaa-----...339...ctggaattttag	cattgata	
E. Cab	taagggat	atctctgcaagg...132...ttaaaaaactgtgctgtttc	TACAAag	CTTTaa	CTACAGTAG	tttataaggatgccaacgaa-----...330...ctggaattttag	caatgata	
L. Afr	taagggat	atctctgcaagg...254...cttatttacttttctttct	TA	-----	ATTTCTCC	-----c	caaaagataaactaatact-----...222...ctggaattttag	cattgata
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id=536503 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26230749_26231298_-1 type=AN VIEW

Figure 280:



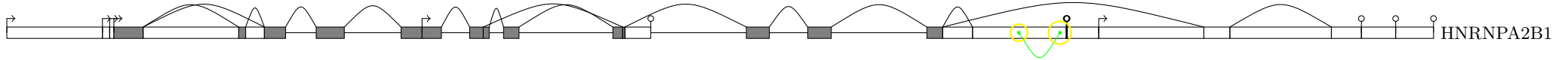
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R.Mac	tgaaacag	gcttcactgtataaataggagaggatgagagcc	CAGAGGTA	CAGAA	cagcttcaggttatcgaaat...411...aataattctaaa	ggaaattg
P.Tro	tgaaacag	gcttcactgtataaataggagaggatgagagcc	CAGAGGTA	CAGAA	cagcttcaggttatcgaaat...412...aataattctaaa	ggaaattg
P.Abe	tgaaacag	gcttcactgtataaataggagaggatgagagcc	CAGAGGTA	CAGAA	cagcttcaggttatcgaaat...411...aataattctaaa	ggaaattg
C.Jac	tgaaacag	gcttcactgtataaataggagaggatgagagcc	CAGAGGTA	CAGAA	cagcttcaggttatcgaaat...416...aataattctaaa	ggaaattg
M.Mus	tgaaacag	gcttcactgtataaataggagaggatgagagcc	CAGAGGTA	CAGAA	cagcttcaggttatggaaat...411...aataattctaaa	ggaaattg
R.Nor	tgaaacag	gcttcactgtataaataggagaggatgagagcc	CAGAGGTA	CAGAA	cagcttcaggttatcgaaat...405...aataattctaaa	ggaaattg
C.Por	tgaaacag	gcttcactgtataaataggagaggatgagagcc	CAGAGGTA	CAGAA	cagcttcaggttatcgaaat...408...aataattctaaa	ggaaattg
O.Cun	tgaaacag	gcttcactgtataaataggagaggatgagagcc	CAGAGGTA	CAGAA	cagcttcaggttatcgaaat...412...ataaattctaaa	ggaaattg
C.Fam	tgaaacag	gcttcactgtataaataggagaggatgagagcc	CAGAGGTA	CAGAA	cagcttcaggttatcgaaat...412...aataattctaaa	ggaaattg
B.Tau	tgaaacag	gcttcactgtataaataggagaggatgagagcc	CAGAGGTA	CAGAA	cagcttcaggttatcgaaat...410...aataattctaaa	ggaaattg
E.Cab	tgaaacag	gcttcactgtataaataggagaggatgagagcc	CAGAGGTA	CAGAA	cagcttcaggttatcgaaat...413...aataattctaaa	ggaaattg
L.Afr	tgaaacag	gcttcactgtataaataggagaggatgagagcc	CAGAGGTA	CAGAA	cagcttcaggttatcgaaat...410...aataattctaaa	ggaaattg
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R.Mac	tttggcag	gaaggtgtcttg...35...agtcttcaagaaataagaaa	TTCTGTACCa	TCTG	aaagtagttcttgttgggtgc...44...tgataaaacaaa----	catttagt
P.Tro	tttggcag	gaaggtgtcttg...35...agtcttcaagaaataagaaa	TTCTGTACCa	TCTG	aaagtagttcttgttgggtgc...44...tgataaaacaaa----	catttagt
P.Abe	tttggcag	gaaggtgtcttg...35...agtcttcaagaaataagaaa	TTCTGTACCa	TCTG	aaagtagttcttgttgggtgc...44...tgataaaacaaa----	catttagt
C.Jac	tttggcag	gaaggtgtcttg...35...agtcttcaagaaataagaaa	TTCTGTACCa	TCTG	aaagtagttcttgttgggtgc...34...tttctgataaa----	catttagt
M.Mus	tttggcag	gaaggtgtcttg...35...agtcttcaagaaataagaaa	TTCTGTACCa	TCTG	aaagtagttcttgttgggtgc...41...----gatttaaaactt	catttagt
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C.Por	tttggcag	gaaggtgtcttg...35...agtcttcaagaaataagaaa	TTCTGTACCa	TCTG	aaagtagttcttgttgggtgc...40...ttaaaaaacaaaactt	gat----
O.Cun	tttggcag	gaaggtgtcttg...35...agtcttcaagaaataagaaa	TTCTGTACCa	TCTG	aaagtagttcttgttgggtgc...49...----aacaaaactt	catttagt
C.Fam	tttggcag	gaaggtgtcttg...35...aatcttcaagaaataagaaa	TTCTGTACCa	TCTG	aaagtagttcttgttgggtgc...54...----aaatacaaat	catttagt
B.Tau	tttggcag	gaaggtgtcttg...35...agtcttcaagaaataagaaa	TTCTGTACCa	TCTG	aaagtagttcttgttgggtgc...50...----taaaacagactt	catttagt
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Figure 281:



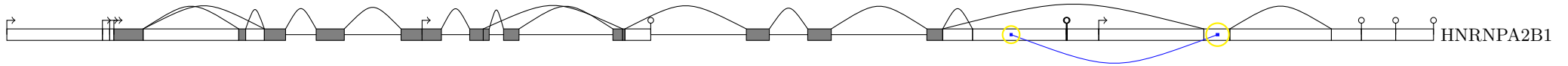
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P.Tro	tgaaacag	gcttcactgtat...197...aaaaaaaaaaaatgcctttga	GACAGTTTCTTAGCTTT	ttaattggtgttctttcta-----	..213...aataattctaaa	ggaaattg
P.Abe	tgaaacag	gcttcactgtat...196...taaaaaaaaaaatgcctttga	GACAGTTTCTTAGCTTT	ttaattggtgttctttcta-----	..213...aataattctaaa	ggaaattg
C.Jac	tgaaacag	gcttcactgtat...200...aaaaaaaaaaaatgcctttga	GACAGTTTCTTAGCTTT	ttaattggtgttctttcta-----	..214...aataattctaaa	ggaaattg
M.Mus	tgaacag	gcttcactgtat...195...gtaaaaaaaaaaatgcctttga	GACAGTTTCTTAGCTTT	ttaattggtgttctttcta-----	..214...aataattctaaa	ggaaattg
R.Nor	tgaacag	gcttcactgtat...189...gtaaaaaaaaaaatgcctttga	GACAGTTTCTTAGCTTT	ttaattggtgttctttcta-----	..214...aataattctaaa	ggaaattg
C.Por	tgaacag	gcttcactgtat...193...ttgtaaaaaaaaaatgcctttga	GACAGTTTCTTAGCTTT	ttaattggtgttctttcta-----	..213...aataattctaaa	ggaaattg
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C.Fam	tgaacag	gcttcactgtat...196...taaaaaaaaaaatgcctttga	GACAGTTTCTTAGCTTT	ttaattggtgttctttcta-----	..214...aataattctaaa	ggaaattg
B.Tau	tgaacag	gcttcactgtat...194...tgtaaaaaaaaaatgcctttga	GACAGTTTCTTAGCTTT	ttaattggtgttctttcta-----	..214...aataattctaaa	ggaaattg
E.Cab	tgaacag	gcttcactgtat...197...aaaaaaaaaaaatgcctttga	GACAGTTTCTTAGCTTT	ttaattggtgttctttcta-----	..214...aataattctaaa	ggaaattg
L.Afr	tgaacag	gcttcactgtat...197...aaaaaaaaaaaatgcctttga	GACAGTTTCTTAGCTTTTAT	-tggtgttcttttagtggg...	..207...aataattctaaa	ggaaattg
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R.Mac	tgaacag	gcttcactgtat...409...--aaaatttaagtgcgtgtgt	AGAGTTAAGAAGCTGTT	gtacatttatgatttaataaaat-aattctaaa	ggaaattg
P.Tro	tgaacag	gcttcactgtat...410...--aaaatttaagtgcgtgtgt	AGAGTTAAGAAGCTGTT	gtacatttatgatttaataaaat-aattctaaa	ggaaattg
P.Abe	tgaacag	gcttcactgtat...409...--aaaatttaagtgcgtgtgt	AGAGTTAAGAAGCTGTT	gtacatttatgatttaataaaat-aattctaaa	ggaaattg
C.Jac	tgaacag	gcttcactgtat...414...--aaaatttaagtgcgtgtgt	AGAGTTAAGAAGCTGTT	gtacatttatgatttaataaaat-aattctaaa	ggaaattg
M.Mus	tgaacag	gcttcactgtat...409...--aaaatttaagtgcgtgtgt	AGAGTTAAGAAGCTGTT	gtacatttatgatttaataaaat-aattctaaa	ggaaattg
R.Nor	tgaacag	gcttcactgtat...403...--aaaatttaagtgcgtgtgt	AGAGTTAAGAAGCTGTT	gtacatttatgatttaataaaat-aattctaaa	ggaaattg
C.Por	tgaacag	gcttcactgtat...406...--aaaatttaagtgcgtgtgt	AGAGTTAAGAAGCTGTT	gtacatttatgatttaataaaat-aattctaaa	ggaaattg
O.Cun	tgaacag	gcttcactgtat...409...--aaaatttaagtgcgtgtgt	AGAGTTAAGAAGCTGTT	gtacatttatgatttaataaaataaattctaaa	ggaaattg
C.Fam	tgaacag	gcttcactgtat...410...--aaaatttaagtgcgtgtgt	AGAGTTAAGAAGCTGTT	gtacatttatgatttaataaaat-aattctaaa	ggaaattg
B.Tau	tgaacag	gcttcactgtat...408...--aaaatttaagtgcgtgtgt	AGAGTTAAGAAGCTGTT	gtacatttatgatttaataaaat-aattctaaa	ggaaattg
E.Cab	tgaacag	gcttcactgtat...411...--aaaatttaagtgcgtgtgt	AGAGTTAAGAAGCTGTT	gtacatttatgatttaataaaat-aattctaaa	ggaaattg
L.Afr	tgaacag	gcttcactgtat...406...taaaaatttaagtgcgtgt	GTAGAGTTAAGAAGCTGTT	gtacatttatgatttaataaaat-aattctaaa	ggaaattg
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Figure 282:



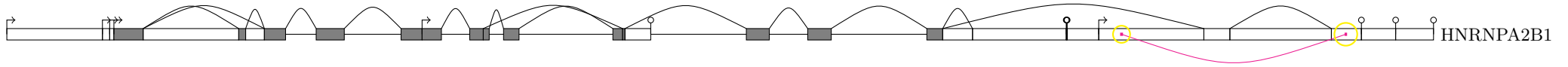
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O. Cun	tgaaacag	gcttcactgtat...155...-----	tggtattat	taataacatta	CCTTACTGTGGAGGAAG	gattgt	aaaaaaaaaaaaatgc-----	...255...ataaattctaaa	ggaaattg
C. Fam	tgaaacag	gcttcactgtat...154...-----	tggtattat	taataacatta	CCTTACTGTGGAGGAAG	gattgt-	aaaaaaaaatgcc-----	...256...aataattctaaa	ggaaattg
B. Tau	tgaaacag	gcttcactgtat...154...-----	tggtattat	taataacatta	CCTTACTGTGGAGGAAG	gattgt-	aaaaaaaaatgcctt-----	...254...aataattctaaa	ggaaattg
E. Cab	tgaaacag	gcttcactgtat...152...-----	tggtattat	taataacatta	CCTTACTGTGGAGGAAG	gattgt	aaaaaaaaaaaaaat-----	...259...aataattctaaa	ggaaattg
L. Afr	tgaaacag	gcttcactgtat...154...-----	tggtattat	taataacatta	CCTTACTGTGGAGGAAGGATTGTA	gattgt	aaaaaaaaatgcctttgag...247...aataattctaaa	ggaaattg	
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id=536499 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26231469_26231958_-1 type=AN

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C. Fam	aatttttag	cattgctatgaaccatggacacgtatattctgctgccacaaagactgtaaagtg-	CTTCaTTTCaACAGcTGAGG	cgcaagccaagtgatcatta--...32...ggtagtaaaatg	gtaggtaa
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L. Afr	aatttttag	cattgatatgaaccatggacaagatattctgctgccacaaagactgtaaagtg-	TGTAAagTTTCaTTTCaACAGcTGAGG	--caagccaagtgatcattaat...30...ggtagtaaaatg	gtaggtaa
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Figure 283:



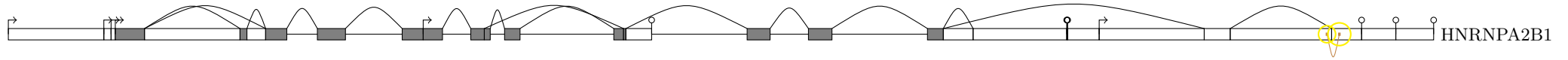
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P.Abe	taagggat	atctctgcaagg...72...tcttcagggacaca-ggtcta-----	GTACaAGAGAAcTCTT	-gacggctactaagttcagcc---...398...ctggaattttag	cattgata
C.Jac	taagggat	atctctgcaagg...72...tcttcagggacaca-ggtcta-----	GTACaAGAGAAcTCTT	-gacggctactaagttcagcc---...390...ctggaattttag	cattgata
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R.Nor	taagggat	atctctgcaagg...72...tcttcagggacaca-ggtcta-----	GTACaAGAGAAcTCTT	-gacg---actaagctcagccagt...388...ctggaattttag	cattgata
C.Por	taagggat	atctctgcaagg...72...tcttcagggacaca-ggtcta-----	GTACaAGAGAAcTCTT	-gacggctactaagttcagcc---...402...ctggaattttag	cattgata
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C.Fam	taagggat	atctctgcaagg...72...tcttcagggacaca-ggtcta-----	GTACaAGAGAAcTCTT	-gacggctactaagttcagcc---...403...ctggaattttag	cattgata
B.Tau	taagggat	atctctgcaagg...59...-cccagcagggtactcttcaGGGATacAGGTCTAGTACAAGaGAACCTCTT	GTACaAGAGAAcTCTT	-gacggctactaagttcagcc---...405...ctggaattttag	cattgata
E.Cab	taagggat	atctctgcaagg...72...tcttcagggacaca-ggtcta-----	GTACaAGAGAAcTCTT	-gacggctactaagttcagcc---...396...ctggaattttag	caatgata
L.Afr	taagggat	atctctgcaagg...72...tcttcagggacaca-ggtcta-----	GTACaAGAGAAcTCTT	-gacggctactaagttcagcc---...400...ctggaattttag	cattgata
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id=536503 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26230749_26231298_-1 type=AN

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R.Mac	tgtggtgctt	...29...ccacagagtcttcaagaaat-----	AAGAAaTTCT	GTAC	catctgaaagtgttctgttggccttcattt-----	aaaagcactc-tttaaataaaagggaaatgttttctgat-aaacaaa-----	cattta
P.Tro	tgtggtgctt	...29...ccacagagtcttcaagaaat-----	AAGAAaTTCT	GTAC	catctgaaagtgttctgttggccttcattt-----	aaaagcactc-tttaaataaaagggaaatgttttctgat-aaacaaa-----	cattta
P.Abe	tgtggtgctt	...29...ccacagagtcttcaagaaat-----	AAGAAaTTCT	GTAC	catctgaaagtgttctgttggccttcattt-----	aaaagcactc-tttaaataaaagggaaatgttttctgat-aaacaaa-----	cattta
C.Jac	tgtggtgctt	...29...ccacagagtcttcaagaaat-----	AAGAAaTTCT	GTAC	catctgaaagtgttctgttggccttcattt-----	aaaagcactc-tttaaataaaagggaaatgttttctgat-aaacaaa-----	cattta
M.Mus	tgtggtgctt	...29...ccacagagtcttcaagaaat-----	AAGAAaTTCT	GTAC	catctgaaagtgttctgttggccttcattt-----	aagaagcact-tttaaag-aaaaggg-aatgttttctgat-ttaaactt	cattta
R.Nor	tgtggtgctt	...29...ccacagagtcttcaagaaat-----	AAGAAaTTCT	GTAC	catctgaaagtgttctgttggccttcattt-----	aagaagcact-tttaaagataaaaggg-aatgttttctgat-ttaaactt	cattta
C.Por	tgtggtgctt	...29...ccacagagtcttcaagaaat-----	AAGAAaTTCT	GTAC	catctgaaagtgttctgttggccttcattt-----	aagaagcact-tttaaagataaaagggaaatgttttctgat-aaacaaaactt	gat---
O.Cun	tgtggtgctt	...29...ccacagagtcttcaagaaat-----	AAGAAaTTCT	GTAC	catctgaaagtgttctgttggccttcattt-----	aagaagcact-tttaaagataaaagggaaatgttttctgat-aaacaaaactt	cattta
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L.Afr	tgtggtgctt	...29...ccacagagtcttcaagaaat-----	AAGAAaTTCT	GTAC	catctgaaagtgttctgttggccttcattt-----	aaaagcactc-tttaaagataaaagggaaatgttttctgat-aaacaaaactt	cat---
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id=536506 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26229924_26230080_-1 type=EN VIEW

Figure 284:



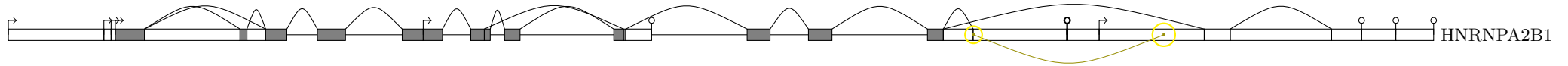
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R.Mac	gtaaaatg	gtaggtaaaagt...460...-taggttcttttggacaaaca	TGATaaACTTCTTCA	gataacttttttttcctttggcag	gaaggtgt
P.Tro	gtaaaatg	gtaggtaaaagt...464...-taggttcttttggacaaaca	TGATaaACTTCTTCA	gataacttttttttcctttggcag	gaaggtgt
P.Abe	gtaaaatg	gtaggtaaaagt...469...-taggttcttttggacaaaca	TGATaaACTTCTTCA	gataacttttttttcctttggcag	gaaggtgt
C.Jac	gtaaaatg	gtaggtaaaagt...456...-taggttcttttggacaaaca	TGATaaACTTCTTCA	gataacttttttttcctttggcag	gaaggtgt
M.Mus	gtaaaatg	gtaggtaaaagt...415...ttaggttc-tgtggacaaaca	TGATaaACTTCTTCA	gataacttttttttcctttggcag	gaaggtgt
R.Nor	gtaaaatg	gtaggtaaaagt...420...ttaggttc-tttggacaaaca	TGATaaACTTCTTCA	gataacttttttttcctttggcag	gaaggtgt
C.Por	gtaaaatg	gtaggtaaaagt...447...ttaggttc-tttggacaaaca	TGATaaACTTCTTCA	gataacttttttttcctttggcag	gaaggtgt
O.Cun	gtaaaatg	gtaggtaaaagt...474...ttaggttc-tttggacaaaca	TGATaaACTTCTTCA	gataacttttttttcctttggcag	gaaggtgt
C.Fam	gtaaaatg	gtaggtaaaagt...480...ttaggttc-tttggacaaaca	TGATaaACTTCTTCA	gataacttttttttcctttggcag	gaaggtgt
B.Tau	gtaaaatg	gtaggtaaaagt...476...ttaggttc-tttggacaaaca	TGATaaACTTCTTCA	gataacttttttttcctttggcag	gaaggtgt
E.Cab	gtaaaatg	gtaggtaaaagt...491...ttaggttc-tttggacaaaca	TGATaaACTTCTTCA	gataacttttttttcctttggcag	gaaggtgt
L.Afr	gtaaaatg	gtaggtaaaagt...486...ttaggttc-tttcaacaaaca	TGATaaACTTCTTCA	gataacttttttttcctttggcag	gaaggtgt
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id=536505 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26230081.26230612_-1 type=AN

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P.Tro	tttggcag	gaaggtgtcttgctgcaggtactaa	TGAAGAAGTgGTCA	accacagagtcttcaagaaa...85...tgataaaacaaa----	catttagt
P.Abe	tttggcag	gaaggtgtcttgctgcaggtactaa	TGAAGAAGTgGTCA	accacagagtcttcaagaaa...85...tgataaaacaaa----	catttagt
C.Jac	tttggcag	gaaggtgtcttgctgcaggtactaa	TGAAGAAGTgGTCA	accacagagtcttcaagaaa...75...tttctgataaa----	catttagt
M.Mus	tttggcag	gaaggtgtcttgctgcaggtactaa	TGAAGAAGTgGTCA	accacagagtcttcaagaaa...82...-----gattaaaactt	catttagt
R.Nor	tttggcag	gaaggtgtcttgctgcaggtactaa	TGAAGAAGTgGTCA	accacagagtcttcaagaaa...84...-----gattaaaactt	catttagt
C.Por	tttggcag	gaaggtgtcttgctgcaggtactaa	TGAAGAAGTgGTCA	accacagagtcttcaagaaa...81...tataaaacaaaactt	gat----
O.Cun	tttggcag	gaaggtgtcttgctgcaggtactaa	TGAAGAAGTgGTCA	accacagagtcttcaagaaa...90...-----aaacaaaactt	catttagt
C.Fam	tttggcag	gaaggtgtcttgctgcaggtactaa	TGAAGAAGTgGTCA	accacagagtcttcaagaaa...95...-----aaatacaaat	catttagt
B.Tau	tttggcag	gaaggtgtcttgctgcaggtactaa	TGAAGAAGTgGTCA	accacagagtcttcaagaaa...91...-----taaacagactt	catttagt
E.Cab	tttggcag	gaaggtgtcttgctgcaggtactaa	TGAAGAAGTgGTCA	accacagagtcttcaagaaa...91...-----aaatacaaat	catttagt
L.Afr	tttggcag	gaaggtgtcttgctgcaggtactaa	TGAAGAAGTgGTCA	accacagagtcttcaagaaa...83...tgataaaatacaactt	cat----
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id=536506 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26229924.26230080_-1 type=EN VIEW

Figure 285: CS=7.8



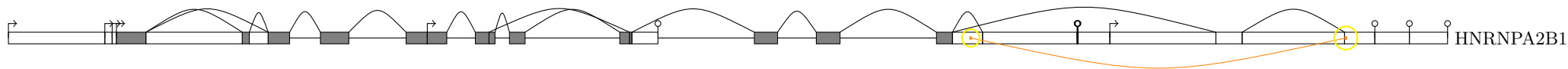
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R. Mac	tgccatgg	gtaagtagcttt...112...tttttttactctttact	CTGTTGAAacAG	GCTtcact
P. Tro	tgccatgg	gtaagtagcttt...112...tttttttactctttact	CTGTTGAAacAG	GCTtcact
P. Abe	tgccatgg	gtaagtagcttt...111...tttttttactctttact	CTGTTGAAacAG	GCTtcact
C. Jac	tgccatgg	gtaagtagcttt...112...tttttttactctttact	CTGTTGAAacAG	GCTtcact
M. Mus	taccatgg	gtaagtagtttt...112...tttttttactctttact	CTGTTGAAacAG	GCTtcact
R. Nor	taccatgg	gtaagtagtttt...116...tttttttactctttact	CTGTTGAAacAG	GCTtcact
C. Por	tgccatgg	gtaagtagcttt...111...tttttttactctttact	CTGTTGAAacAG	GCTtcact
O. Cun	tgccatgg	gtaagtagcttt...112...tttttttactctttact	CTGTTGAAacAG	GCTtcact
C. Fam	tgccatgg	gtaagtagcttt...112...tttttttactctttact	CTGTTGAAacAG	GCTtcact
B. Tau	tgccatgg	gtaagtagcttt...113...tttttttactctttact	CTGTTGAAacAG	GCTtcact
E. Cab	tgccatgg	gtaagtagcttt...111...tttttttactctttact	CTGTTGAAacAG	GCTtcact
L. Afr	tgccatgg	gtaagtagcttt...110...tttttttactctttact	CTGTTGAAacAG	GCTtcact
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id=536498 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26231959_26232114_-1 type=AN

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P. Tro	taagggat	atctctgcaagg...291...ataaactaat---actcttaaat	GGTC--TTCAgtATAG	-tggttcttacgtagttaa	---...180...ccggaatttag	cattgata	
P. Abe	taagggat	atctctgcaagg...291...ataaactaat---actcttaaat	GGTC--TTCAgtATAG	-tggttcttacgtagttaa	---...180...ctggaatttag	cattgata	
C. Jac	taagggat	atctctgcaagg...291...ataaactaat---attcttaaat	GGTC--TTCAgtATAG	-tggttcttacgtagttaa	---...172...ctggaatttag	cattgata	
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C. Por	taagggat	atctctgcaagg...293...-taaattaata-actcttaaat	GGTC--TTCAgtATAG	-tggttcttacgtagttaa	---...182...ctggaatttag	cattgata	
O. Cun	taagggat	atctctgcaagg...291...ataaactaat---actcttaaat	GGTC--TTCAgtATAG	-tggttcttacgtagttaa	---...182...ctggaatttag	cattgata	
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id=536503 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26230749_26231298_-1 type=AN VIEW

Figure 286:



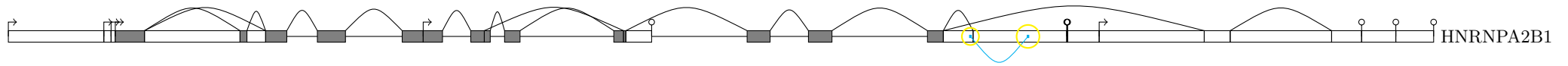
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R. Mac	tgccatgg	gtaagtagcttt...47...-aaagcttttaggatcatgt	TATCT	TCCTTAAA	atctggttagatggataaatt...31...ctggtgaaacag	gcttcact
P. Tro	tgccatgg	gtaagtagcttt...47...-aaagcttttaggatcatgt	TATCT	TCCTTAAA	atctggttagatggataaatt...31...ctggtgaaacag	gcttcact
P. Abe	tgccatgg	gtaagtagcttt...47...-aaagcttttaggatcatgt	TATCT	TCCTTAAA	atctggttagatggataaatt...30...ctggtgaaacag	gcttcact
C. Jac	tgccatgg	gtaagtagcttt...47...-aaagcttttaggatcatgt	TATCT	TCCTTAAA	atctggttagatggataaatt...31...ctggtgaaacag	gcttcact
M. Mus	taccatgg	gtaagtagcttt...48...-aaagcatttaggatcatgt	TATCT	TCCTTAAA	atctggttagatggataaatt...30...ctggtgaaacag	gcttcact
R. Nor	taccatgg	gtaagtagcttt...51...-aagcaatttaggatcatgt	TATCT	TCCTTAAA	atctggttagatggataaatt...31...ctggtgaaacag	gcttcact
C. Por	tgccatgg	gtaagtagcttt...47...-aagcttttaggatcatgt	TATCT	TCCTTAAA	atctggttagatggataaatt...30...ctggtgaaacag	gcttcact
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C. Fam	tgccatgg	gtaagtagcttt...47...-aaagcttttaggatcatgt	TATCT	TCCTTAAA	atctggttagatggataaatt...31...ctggtgaaacag	gcttcact
B. Tau	tgccatgg	gtaagtagcttt...48...-aaagcttttaggatcatgt	TATCT	TCCTTAAA	atctggttagatggataaatt...31...ctggtgaaacag	gcttcact
E. Cab	tgccatgg	gtaagtagcttt...46...-aaagcttttaggatcatgt	TATCT	TCCTTAAA	atctggttagatggataaatt...31...ctggtgaaacag	gcttcact
L. Afr	tgacatgg	gtaagtagcttt...46...aaaagcatttaggatgta	ATCT	TCCTTAAA	atctggttagatggataaatt...31...ctggtgaaacag	gcttcact
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P. Tro	tTTGgcAG	GAAGGTG	tcttgctgcaggt	aactaat...118...tgataaaacaaa----	catttagt
P. Abe	tTTGgcAG	GAAGGTG	tcttgctgcaggt	aactaat...118...tgataaaacaaa----	catttagt
C. Jac	tTTGgcAG	GAAGGTG	tcttgctgcaggt	aactaat...108...ttttctgataaa----	catttagt
M. Mus	tTTGgcAG	GAAGGTG	tcttgctgcaggt	aactaat...115...----gatttaaaactt	catttagt
R. Nor	tTTGgcAG	GAAGGTG	tcttgctgcaggt	aactaat...117...----gatttaaaactt	catttagt
C. Por	tTTGgcAG	GAAGGTG	tcttgctgcaggt	aactaat...114...ttaaaaaacaaaaactt	gat----
O. Cun	tTTGgcAG	GAAGGTG	tcttgctgcaggt	aactaat...123...----aaacaaaactt	catttagt
C. Fam	tTTGgcAG	GAAGGTG	tcttgctgcaggt	aactaat...128...----aaatacaaat	catttagt
B. Tau	tTTGgcAG	GAAGGTG	tcttgctgcaggt	aactaat...124...----taaacagactt	catttagt
E. Cab	tTTGgcAG	GAAGGTG	tcttgctgcaggt	aactaat...124...----aaatacaactt	catttagt
L. Afr	tTTGgcAG	GAAGGTG	tcttgctgcaggt	aactaa...117...tgacaaaaatacaactt	cat----
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id=536506 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26229924_26230080_-1 type=EN VIEW

Figure 287:



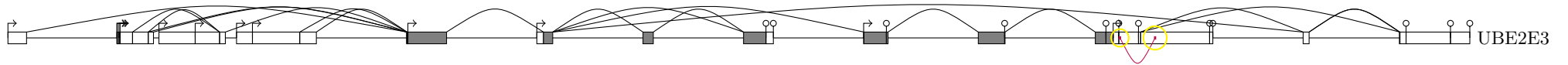
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C. Jac	tgccatgg	gtaagtagcttt...94...-gataatttcataacctattt	TTTTT	TACTCt	TTAC	ttctgttgaacag	gcttcact
M. Mus	taccatgg	gtaagtagcttt...94...ggataatttcataacctattt	TTTTT	TACTCt	TTAC	ttctgttgaacag	gcttcact
R. Nor	taccatgg	gtaagtagcttt...98...-gataatttcataacctattt	TTTTT	TACTCt	TTAC	ttctgttgaacag	gcttcact
C. Por	tgccatgg	gtaagtagcttt...93...ggataatttcataacctattt	TTTTT	TACTCt	TTAC	ttctgttgaacag	gcttcact
O. Cun	tgccatgg	gtaagtagcttt...94...-gataatttcataacctattt	TTTTT	TACTCt	TTAC	ttctgttgaacag	gcttcact
C. Fam	tgccatgg	gtaagtagcttt...94...-gataatttcataacctattt	TTTTT	TACTCt	TTAC	ttctgttgaacag	gcttcact
B. Tau	tgccatgg	gtaagtagcttt...95...-gataatttcataacctattt	TTTTT	TACTCt	TTAC	ttctgttgaacag	gcttcact
E. Cab	tgccatgg	gtaagtagcttt...93...-gataatttcataacctattt	TTTTT	TACTCt	TTAC	ttctgttgaacag	gcttcact
L. Afr	tgacatgg	gtaagtagcttt...92...-gataatttcataacctattt	TTTTT	TACTCt	TTAC	ttctgttgaacag	gcttcact
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id=536498 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26231959_26232114_-1 type=AN

H. Sap	tgaaacag	gcttcactgtat...241...gtttctttctagtggtcttt	GTAAGAGTGt	AGAAG	cattccttctttgataatgt---	170...aataattctaaa	ggaaattg
R. Mac	tgaaacag	gcttcactgtat...242...gtttctttctagtggtcttt	GTAAGAGTGt	AGAAG	cattccttctttgataatgt---	169...aataattctaaa	ggaaattg
P. Tro	tgaaacag	gcttcactgtat...243...gtttctttctagtggtcttt	GTAAGAGTGt	AGAAG	cattccttctttgataatgt---	169...aataattctaaa	ggaaattg
P. Abe	tgaaacag	gcttcactgtat...242...gtttctttctagtggtcttt	GTAAGAGTGt	AGAAG	cattccttctttgataatgt---	169...aataattctaaa	ggaaattg
C. Jac	tgaaacag	gcttcactgtat...246...gtttctttctagtggtcttt	GTAAGAGTGt	AGAAG	cattccttctttgataatgt---	170...aataattctaaa	ggaaattg
M. Mus	tgaaacag	gcttcactgtat...241...gtttctttctagtggtcttt	GTAAGAGTGt	AGAAG	cattccttctttgataatgt---	170...aataattctaaa	ggaaattg
R. Nor	tgaaacag	gcttcactgtat...235...gtttctttctagtggtcttt	GTAAGAGTGt	AGAAG	cattccttctttgataatgt---	170...aataattctaaa	ggaaattg
C. Por	tgaaacag	gcttcactgtat...239...gtttctttctagtggtcttt	GTAAGAGTGt	AGAAG	cattccttctttgataatgt---	169...aataattctaaa	ggaaattg
O. Cun	tgaaacag	gcttcactgtat...244...gtttctttctagtggtcttt	GTAAGAGTGt	AGAAG	cattc---ctttgataatgttaa...	168...ataaattctaaa	ggaaattg
C. Fam	tgaaacag	gcttcactgtat...242...gtttctttctagtggtcttt	GTAAGAGTGt	AGAAG	cattccttctttgataatgt---	170...aataattctaaa	ggaaattg
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E. Cab	tgaaacag	gcttcactgtat...243...gtttctttctagtggtcttt	GTAAGAGTGt	AGAAG	cattccttctttgataatgt---	170...aataattctaaa	ggaaattg
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id=536499 gene=ENSG00000122566 name=HNRNPA2B1 segment=chr7_26231469_26231958_-1 type=AN VIEW

Figure 288:



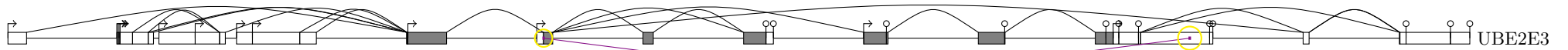
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R. Mac	aAGGAGCA	gaAGGC	atcttctcactgtgctgcaa...71...gagcctgggaga	ctcccca
P. Tro	aAGGAGCA	gaAGGC	atcttctcactgtgctgcaa...71...gagcctgggaga	ctcccca
P. Abe	aAGGAGCA	gaAGGC	atcttctcactgtgctgcaa...71...gagcctgggaga	ctcccca
C. Jac	aAGGAGCA	gaAGGC	atcttctcactgtgctgcaa...71...gagcctgggaga	ctcccca
M. Mus	aAGGAGCA	gaAGGC	cttcccactgtgctgagg...72...gagactgggaga	ctcccca
R. Nor	aAGGAGCA	gaAGGC	cttcccactgtgctgagg...71...gagactgggaga	cccccaa
O. Cun	aAGGAGCA	gaAGGC	atcttctcactgtgctgcaa...73...gagactgggaga	ctcccca
C. Fam	aAGGAGCA	gaAGGC	ccctcccactgtgctgcaa...73...gagactgggaga	ctcccca
B. Tau	aAGGAGCA	gaAGGC	atcttcccactgtgctgcaa...73...gagactgggaga	ctcccca
E. Cab	aAGGAGCA	gaAGGC	atcttctcactgtgctgcaa...73...gagactgggaga	ctcccca
S. Sus	aAGGAGCA	gaAGGC	atcttctcactgtgctgcaa...71...gagactgggaga	ctcccca
O. Avi	aAGGAGCA	gaAGGC	cttcccactgtgctgcaa...73...gagactgggaga	ctcccca
L. Afr	aAGGAGCA	gaAGGC	atcttctcctgtgctgcaa...73...gagactgggaga	ctccctaa
	*****	*****	*** * *****	*** ***** * ** *

id=125805 gene=ENSG00000170035 name=UBE2E3 segment=chr2_181927648_181927756_1 type=AN

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R. Mac	ccaaaaag	gtaaatgctatc...34...tttaaacgcctacttgcaa	GTCTTGCT	CTTT	gggatataaaaatgatttt...271...tgctcctgaagg	catagttt
P. Tro	ccaaaaag	gtaaatgctatc...34...tttaaacgcctacttgcaa	GTCTTGCT	CTTT	gggatataaaaatgatttt...271...tgctcctgaagg	catagttt
P. Abe	ccaaaaag	gtaaatgctatc...34...tttaaacgcctacttgcaa	GTCTTGCT	CTTT	gggatataaaaatgatttt...271...tgctcctgaagg	catagttt
C. Jac	ccaaaaag	gtaaatgctatc...34...tttaaacgcctacttgcaa	GTCTTGCT	CTTT	gggatataaaaatgatttt...263...tgctcctgaagg	catagttt
M. Mus	ccaaaaag	gtaaaagctacc...34...tttaaatgcctacttgcaa	GTCTTGCT	CTTT	gggatataaaaatgatttt...261...tgctcctgaagg	catagttt
R. Nor	ccaaaaag	gtaaatgctacc...34...tttaaatgcctacttgcaa	GTCTTGCT	CTTT	gggatataaaaatgatttt...262...tgctcctgaagg	cagagttt
O. Cun	ccaaaaag	gtaaatgctctc...34...tttaaatgcctacttgcaa	GTCTTGCT	CTTT	gggatataaaaatgatttt...271...tgctcctgaagg	cgtagttt
C. Fam	caaaaaag	gtaaatgctatc...34...tttaaacgcctacttgcaa	GTCTTGCT	CTTT	gggatataaaaatgatttt...271...tgctcctgaagg	catagttt
B. Tau	caaaaaag	gtaaatgctatc...34...tttaaacgcctacttgcaa	GTCTTGCT	CTTT	gggatataaaaatgatttt...271...tgctcctgaagg	catagttt
E. Cab	ccaaaaag	gtaaatgctatc...34...tttaaacgcctacttgcaa	GTCTTGCT	CTTT	gggatataaaaatgatttt...271...tgctcctgaagg	catagttt
S. Sus	ccaaaaag	gtaaatgctatc...34...tttaaacgcctacttgcaa	GTCTTGCT	CTTT	gggatataaaaatgatttt...271...tgctcctgaagg	catagttt
O. Avi	caaaaaag	gtaaatgctatc...34...tttaaacgcctacttgcaa	GTCTTGCT	CTTT	gggatataaaaatgatttt...271...tgctcctgaagg	catagttt
L. Afr	ctaaaaag	gtaaatgctatc...34...tttaaacgcctacttgcaa	GTCTTGCT	CTTT	gggatataaaaatgatttt...270...tgctcccgaagg	cttagttt
	* ****	**** * *	*****	*****	***** ****	* ****

id=125807 gene=ENSG00000170035 name=UBE2E3 segment=chr2_181927769_181928150_1 type=AN VIEW

Figure 289:



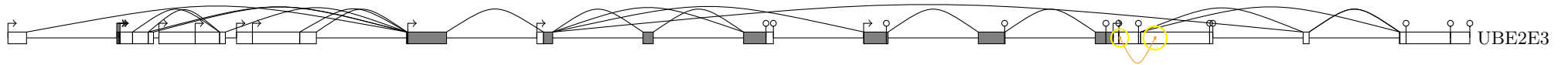
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R.Mac	--tagactat	ctcaaatcctttt	gtctcttct	CATTTCACt	AACAG	aattcaga
P.Tro	--tagactat	ctcaaatcctttt	gtctcttct	CATTTCACt	AACAG	aattcaga
P.Abe	--tagactgt	ctcaaatcctttt	gtctcttct	CATTTCACt	AACAG	aattcaga
C.Jac	--tagactat	ctcaaatcctttt	gtctgttct	CATTTCACt	AACAG	aattcaaa
M.Mus	--tagactac	ctcagatcctttt	gtttgttct	CATTTCACt	AACAG	aattcaga
R.Nor	--tagactac	ctcagatcctttt	gtttgttct	CATTTCACt	AACAG	aattcaga
O.Cun	--tagactat	ctcaaatcctttt	gtctgttct	CATTTCACt	AACAG	aattcaga
C.Fam	--tagactac	ctcaaatcctttt	gtctgttct	CATTTCACt	AACAG	aattcaga
F.Cat	--tagactat	ctcaaatcctttt	gtctgttct	CATTTCACt	AACAG	aattcaga
B.Tau	tgtagact--	ctcaaatcctttt	gtctgttct	CATTTCACt	AACAG	aattcaga
E.Cab	--tagactat	ctcaaatcctttt	gtctgttct	CATTTCACt	AACAG	aattcaga
O.Avi	tgtagact--	ctcaaatcctttt	gtctgttct	CATTTCACt	AACAG	aattcaga
L.Afr	--tagactat	ctcaaatgctttt	gtctcttct	CATTTCACt	AACAG	aattcaga
	*****	*** ** ***** ** *	*****	*****	*****	***** *

id=125787 gene=ENSG00000170035 name=UBE2E3 segment=chr2_181848733_181848769.1 type=AN

H.Sap	ccaaaaag	gtaaatgctatc...	.225...	ttctgagtatgtggttc	atgCTGTTGTGA	aaAATG	ttttacctttt	acctttgtc...	.78...	tgctcctgaagg	catagttt
R.Mac	ccaaaaag	gtaaatgctatc...	.225...	ttctgagtatgtggttc	atgCTGTTGTGA	aaAATG	ttttacctttt	acctttgtc...	.78...	tgctcctgaagg	catagttt
P.Tro	ccaaaaag	gtaaatgctatc...	.225...	ttctgagtatgtggttc	atgCTGTTGTGA	aaAATG	ttttacctttt	acctttgtc...	.78...	tgctcctgaagg	catagttt
P.Abe	ccaaaaag	gtaaatgctatc...	.225...	ttctgagtatgtggttc	atgCTGTTGTGA	aaAATG	ttttacctttt	acctttgtc...	.78...	tgctcctgaagg	catagttt
C.Jac	ccaaaaag	gtaaatgctatc...	.217...	atctgagtatgtggttc	atgCTGTTGTGA	aaAATG	ttttacctttt	acctttgtc...	.78...	tgctcctgaagg	catagttt
M.Mus	cccaaaag	gtaaaaagctacc...	.225...	ttctgagtatgtggttc	atgCTGTTGTG	--AAATG	ttttacctttt	gtcagtttgt...	.70...	tgctcctgaagg	catagttt
R.Nor	cccaaaag	gtaaatgctacc...	.225...	ttctgagtatgtggttc	atgCTGTTGTG	-AaAATG	ttttacctttt	gtcagtttgt...	.70...	tgctcctgaagg	cagagttt
O.Cun	cccaaaaag	gtaaatgctctc...	.225...	ttctgagtatgtggttc	atgCTGTTGTGA	aaAATG	ttttacctttt	acctttgtc...	.78...	tgctcctgaagg	cgtagttt
C.Fam	caaaaaag	gtaaatgctatc...	.225...	ttctgagtatgtggttc	atgCTGTTGTGA	aaAATG	ttttacctttt	acctttgtc...	.78...	tgctcctgaagg	catagttt
F.Cat	ccaaaaag	gtaaatgctatc...	.225...	ttctgagtatgtggttc	atgCTGTTGTGA	aaAATG	ttttacctttt	acctttgtc...	.78...	tgctcctgaagg	catagttt
B.Tau	ccaaaaag	gtaaatgctatc...	.225...	ttctgagtatgtggttc	atgCTGTTGTGA	aaAATG	ttttacctttt	acctttgtc...	.78...	tgctcctgaagg	catagttt
E.Cab	ccaaaaag	gtaaatgctatc...	.225...	ttctgagtatgtggttc	atgCTGTTGTGA	aaAATG	ttttacctttt	acctttgtc...	.78...	tgctcctgaagg	catagttt
O.Avi	caaaaaag	gtaaatgctatc...	.225...	ttctgagtatgtggttc	atgCTGTTGTGA	aaAATG	ttttacctttt	acctttgtc...	.78...	tgctcctgaagg	catagttt
L.Afr	ctaaaaag	gtaaatgctatc...	.225...	ttctgagtatgtggttc	atgCTGTTGTG	-AaAATG	ttttacctttt	acctttgtc...	.78...	tgctcccgaagg	cctagttt
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id=125807 gene=ENSG00000170035 name=UBE2E3 segment=chr2_181927769_181928150.1 type=AN VIEW

Figure 290:



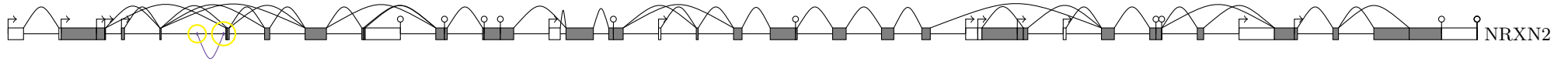
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R.Mac	aacataat	tcacataat	ttgtatgcagtg	TGAAGGAGCA	gaAGGCat
P.Tro	aacataat	tcacataat	ttgtatgcagtg	TGAAGGAGCA	gaAGGCat
P.Abe	aacataat	tcacataat	ttgtatgcagtg	TGAAGGAGCA	gaAGGCat
C.Jac	aacataat	tcacataat	ttgtatgcagtg	TGAAGGAGCA	gaAGGCat
M.Mus	aacataat	tcacatcat	ttgtatgcagtg	TGAAGGAGCA	gaAGGCct
R.Nor	aacataat	tcacataat	ttgtatgcagtg	TGAAGGAGCA	gaAGGCct
O.Cun	aacataat	tcacataat	ttgtatgcagtg	TGAAGGAGCA	gaAGGCat
C.Fam	cacataat	tcacagaat	ttgtatgcagtg	TGAAGGAGCA	gaAGGCcc
B.Tau	aacataat	tcacataat	ttgtatgcagtg	TGAAGGAGCA	gaAGGCat
E.Cab	aacataat	tcacataat	ttgtatgcagtg	TGAAGGAGCA	gaAGGCat
S.Sus	aacataat	tcacataat	ttgtatgcagtg	CGAAGGAGCA	gaAGGCat
O.Avi	cacataat	tcacataat	ttgtatgcagtg	TGAAGGAGCA	gaAGGCct
L.Afr	aacataat	tcacataat	ttgtatgcagtg	TGAAGGAGCA	gaAGGCat
	*****	*****	* *****	*** *****	*****

id=125804 gene=ENSG00000170035 name=UBE2E3 segment=chr2_181927617_181927647_1 type=AN

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R.Mac	ccaaaaag	gtaaatgctatc...	34...	tttaaaacgcctacttgcaa	GTCTTGCTTCTTTG	ggatatcaaaatgtattttg...	270...	tgctcctgaagg	catagttt
P.Tro	ccaaaaag	gtaaatgctatc...	34...	tttaaaacgcctacttgcaa	GTCTTGCTTCTTTG	ggatatcaaaatgtattttg...	270...	tgctcctgaagg	catagttt
P.Abe	ccaaaaag	gtaaatgctatc...	34...	tttaaaacgcctacttgcaa	GTCTTGCTTCTTTG	ggatatcaaaatgtattttg...	270...	tgctcctgaagg	catagttt
C.Jac	ccaaaaag	gtaaatgctatc...	34...	tttaaaacgcctacttgcaa	GTCTTGCTTCTTTG	ggatatcaaaatgtattttg...	262...	tgctcctgaagg	catagttt
M.Mus	ccaaaaag	gtaaaagctacc...	34...	tttaaaatgcctacttgcaa	GTCTTGCTTCTTTG	ggatatcaaaatgtattttg...	260...	tgctcctgaagg	catagttt
R.Nor	ccaaaaag	gtaaatgctacc...	34...	tttaaaatgcctacttgcaa	GTCTTGCTTCTTTG	ggatatcaaaatgtattttg...	261...	tgctcctgaagg	cagagttt
O.Cun	ccaaaaag	gtaaatgctctc...	34...	tttaaaatgcctacttgcaa	GTCTTGCTTCTTTG	ggatatcaaaatgtattttg...	270...	tgctcctgaagg	cgtagttt
C.Fam	caaaaaag	gtaaatgctatc...	34...	tttaaaacgcctacttgcaa	GTCTTGCTTCTTTG	ggatatcaaaatgtattttg...	270...	tgctcctgaagg	catagttt
B.Tau	caaaaaag	gtaaatgctatc...	34...	tttaaaacgcctacttgcaa	GTCTTGCTTCTTTG	ggatatcaaaatgtattttg...	270...	tgctcctgaagg	catagttt
E.Cab	ccaaaaag	gtaaatgctatc...	34...	tttaaaacgcctacttgcaa	GTCTTGCTTCTTTG	ggatatcaaaatgtattttg...	270...	tgctcctgaagg	catagttt
S.Sus	ccaaaaag	gtaaatgctatc...	34...	tttaaaacgcctacttgcaa	GTCTTGCTTCTTTG	ggatatcaaaatgtattttg...	270...	tgctcctgaagg	catagttt
O.Avi	caaaaaag	gtaaatgctatc...	34...	tttaaaacgcctacttgcaa	GTCTTGCTTCTTTG	ggatatcaaaatgtattttg...	270...	tgctcctgaagg	catagttt
L.Afr	ctaaaaag	gtaaatgctatc...	34...	tttaaaacgcctacttgcaa	GTCTTGCTTCTTTG	ggatatcaaaatgtattttg...	269...	tgctcccgaagg	cttagttt
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id=125807 gene=ENSG00000170035 name=UBE2E3 segment=chr2_181927769_181928150_1 type=AN VIEW

Figure 291:



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R. Mac catggaag gtgagtgaagcc...4370...-----cctcccgaagaaaaaaaa-----AAGAAAAAAGAaAAAGGAAAAAG-----caaccctcccagcctaatgc---.373...ttctttctttct ctccttcc
P. Tro catggaag gtgagtgaagcc...4425...-----cctcccgaagaaaaaaaa-----AAGAAAAAAGAaAAAGGAAAAAG-----caaccctcccagcctaatgc---.367...ttctttctttct ctccttcc
C. Jac cgtggaag gtgagtgaagcc...4536...-----cctcccgaagaaaaaaaa-----AAGAAAAAAGaaAAAGG-----aaaaagcaaccctcccagcc---.371...ttctttctttct ctccttcc
M. Mus catggaag gtgagtggagcc...4127...-----cctcctggaagaaaaaaaaAAAGAAAAAGAAaAAAGAAAAAGGaaAAGGaaAAAGGAAAGG-----ccgcttcgcgccgcccgcg---.353...ttctttctttct ctccttcc
R. Nor catggaag gtgagtggagcc...4141...-----tctccacctcctggaagaaa-----AAAAAAGaAAAGAAAAaAAAGAAaAAAGaaGAAAGaaaaaggaaagcagcacc---.349...ttctttctttct cttcttcc
C. Por catggaag gtgagtgaagct...3971...-----gcctcccgaagaaaaaaaa-----AAAGAAAAaAAAGAAAAaAAAGAAAAAGGAAAAAG-----caacc-tctcagcctcatgct---.362...ttctttctttct ctccttcc
O. Cun catggaag gtgagtgaagcc...4313...ttttttctctcgcctccc-----GGAAGaAAAAAaAAAGAAAAAAGaaAAAGGAAAAAG-----cagcctcccagcctcatgc---.392...ttctttctttct ctccttcc
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B. Tau catggaag gtgagtgaaccc...4427...-ttttctctcgcctccgga-----AGAAAAAaAAAGAAAAAAGaaAAAGGAAaAAAG-----cagccctcccagcctcatgc---.374...ttctttctttct ctccttcc
E. Cab catggaag gtgagtgatgcc...4242...ttttttctctcgcctccc-----GGAAGAAAAAaAAAGAAAAAAGaaAAAGGAAaAAAG-----cagccctcccagcctcatgc---.382...ttcttctctct ctccttcc
S. Sus catggaag gtgagtgatgcc...4430...-----ccggaagaaaaaaaaaaaa-----AGAAAAaAAAGAAaAAAGGAAAAAG-----cagccctcccagcctcatgc---.371...ttctttctttct ctccttcc
L. Afr catggaag gtgagtgcgctt...4540...-----gcctcccgaagaaaaaaaa-----AAAGAAAAaAAAGAAAAAGGAAAAA-----gcaactctcccagcctcatg---.361...ttctttctttct ctccttcc
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id=128940 gene=ENSG00000110076 name=NRXN2 segment=chr11.64460367.64465246_-1 type=IN

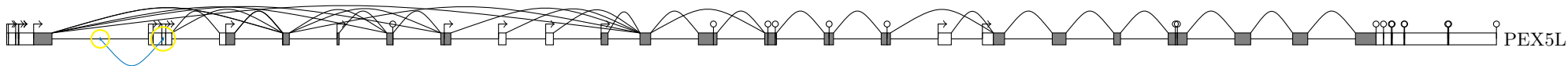
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R. Mac catggaag gtgagtgaagcc...4746...-----acttgtgttttctttgtttc-----TTTCccCTTTCTTTCTTTTTCTT-----:-----cttcttttttctttctttctttct ctccttcc
P. Tro catggaag gtgagtgaagcc...4798...-----actcgtgttttctttgtttc-----TTTCccCTTTCTTTCTTTTTCTT-----:-----cttcttttttctttctttctttct ctccttcc
C. Jac cgtggaag gtgagtgaagcc...4718...-----accctctctgatgcccctaa-----TCTTTCTTTcTTTCTT-----:-----ctttttctttctttttctttctttctttct ctccttcc
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C. Por catggaag gtgagtgaagct...4358...-----ttctttcccccttttctttctCTTTTtaTTCTTTTTTcCTTTCTTTCT-----:-----ttct ctccttcc
O. Cun catggaag gtgagtgaagcc...4723...-----actcgtgttttctttgtttc-----TTTCccCTTTCTTTCTTTTTCTTcTTTTTTTTCC-----:-----ccctttctttctttct ctccttcc
C. Fam catggaag gtgagtgatgct...4689...-tttgatgactcgtgttttctTTGTTTcTTTCccCTTTCTTTcTTTTCTCTTcTTTTTTTTTTTTTCT-----:-----ccctttctttctttct ctccttcc
B. Tau catggaag gtgagtgaaccc...4819...-----tgttttctttgtttctttccCTTTTCTTTCTTTTTTTCTTccTTTTTTTTTCT-----:-----cctttctttctttct ctccttcc
E. Cab catggaag gtgagtgatgcc...4640...-----tgttttctttgtttctttccCTTTTCTTTCTTTTTTTCTcTTTTtTTTTtTTTCC-----:-----tttcttctctct ctccttcc
S. Sus catggaag gtgagtgatgcc...4801...-----actcgtgttttctttgtttc-----TTTCccCTTTCTTTcCTTTTTCT-----:-----tcttttttgtttctcctttctttctttct ctccttcc
L. Afr catggaag gtgagtgcgctt...4930...-----tttctttcccttttcttta-----TTTTTTCTTcTTTCTTcTTTCTT-----:-----ct ctccttcc
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id=128940 gene=ENSG00000110076 name=NRXN2 segment=chr11.64460367.64465246_-1 type=IN VIEW

Figure 292:



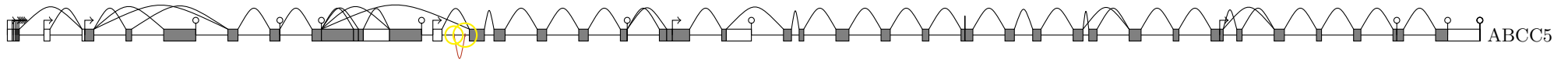
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P. Tro	acatgcag	gtaagacatttc...4926...-----aggaagtgattgccctgtgg	CTTCTCCTCCCA	cagaagccctgccccctc-a	cacttggg
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C. Jac	acatgcag	gtgagacgcctc...4921...-gagcacaggaagtgccttgcc	CTCTgg	CTTCTCCTCCCA	cagaagccctgcc-cctc-g
M. Mus	acatgcag	gtaagagacctc...4926...-----aggaagtgattgccctgtgg	CTTCTCCTCCCA	cataagccctgccccctc-a	cacttggg
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C. Por	acatgcag	gtaagctgtttc...4920...-gagcacaggaagtgccttgcc	CTCTgg	CTTCTCCTCCCA	cagaagccctactcctc-c
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C. Fam	acatgcag	gtaagacactgc...4919...-gggcacaggaagtgccttgcc	CTCTgg	CTTCTCCTCCCA	cagaagccctgcctccttaa
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E. Cab	acatgcag	gtaagacatttc...4920...-gagcacaggaagtgccttgcc	CTCTgg	CTTCTCCTCCCA	cagaagccctgcctcctc-a
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P. Abe	cccggcTG	GGAGGAGGGAGGAG	-----agctgaagatccctgcctgggctggct	gagctaag	
C. Jac	cccggcTG	GGAGGAGGGAGGAG	-----ctgaagatccctgcctgggctggcg	gagctaag	
M. Mus	cccggcTG	GGAGGAGGGAGGAG	agaggagagctgaagatccccgcctgggctggct	cagctaag	
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C. Por	cccggcTG	GGAGGAGGGAGGAG	-----ctgaagattcctgcctggctggct	gatctaaa	
O. Cun	cccggcTG	GGAGGAGGGAGGAG	-----ctgaagattcctgcctgggctggct	gagctaag	
C. Fam	cctggcTG	GGAGGAGGGAGGAG	-----ctgaagatccctgcctgggctggct	gatctaag	
B. Tau	cccggcCTG	GGAGGAGGGAGGAG	CAGAAG	-----atcctggctgggctggct	gatctcag
E. Cab	cctggcTG	GGAGGAGGGAGGAG	-----ctgaagatccctgcctgtactggct	gatctgag	
S. Sus	cccggcTG	GGAGGAGGGAGGAG	-----ctgaagatccctgcctgggc-gccc	gatctaag	
L. Afr	tctggcTG	GGAGGAGGGAGGAG	-----aactgaagatccctgcccggagtggct	gatctagc	
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Figure 293: CS=10.92



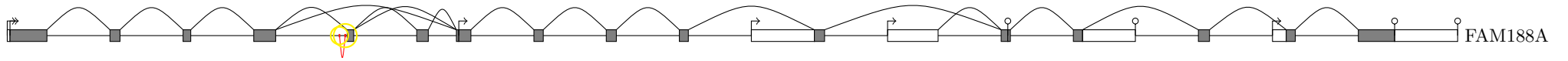
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P. Tro	gtacaact	gtaggtacactg...131...-----gagttaatttcagctcattg	ATAGg	TTTATGTTAca	TTAGAAAAGAGTAa	TGGTTTTG	atgatgtcctgtaaggaaga...195...ctctccctgtag	gccttcat	
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Figure 294: CS=13.44



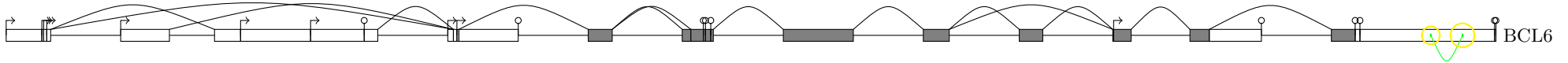
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C. Fam	acattcct	gtaagatacatt...3221...agggaaaattttgattgct	TGAAAGTATTTa	CAGCCTGCTGTG	tgatcctt	gtgtcatttatt...26...ttttatgtatag	ctgccttg
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P. Tro	acattcct	gtaagatatatt...3080...atcctt	gtgtcatttatttgc	CATGtGTAGtGCTGaaAAGTGtCTTTA	tgatag	ctgccttg
P. Abe	acattcct	gtaagatatatt...3083...atcctt	gtgtcatttatttgc	CATGtGTAGtGCTGaaAAGTGtCTTTA	tgatag	ctgccttg
C. Jac	acattcct	gtaagatatatt...3031...atcctt	gtgtcatttatttgc	CATGtGTAGtGCTGaaAAGTGtCTTTA	tgatag	ctgccttg
M. Mus	acattcct	gtaagatacgtt...2854...atcctt	gtgtcatttatttgc	CATGtGTAGtGCTGaaAAGTGtCTTTA	tgatag	ctgccttg
C. Por	acactcct	gtaagatatggt...3015...atcctt	gtgtcatttatttgc	CGTgGTAGtGCTGaaAAGTGtCTTTA	tgatag	ctgccttg
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B. Tau	acattcct	gtaagacacact...3213...atcctt	gtgtcatttatttgc	CATGtGTAGtGCTGaaAAGTGtCTTTA	tgatag	ctgccttg
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S. Sus	acattcct	gtaagatacact...3164...atcctt	gtgtcatttatttgc	CATGtGTAGtGCTGaaAAGTGtCTTTA	tgatag	ctgccttg
O. Avi	acattcct	gtaagacacact...3271...atcctt	gtgtcatttatttgc	CATGtGTAGtGCTGaaAAGTGtCTTTA	tgatag	ctgccttg
L. Afr	accttcct	gtaagatacatt...3460...atcctt	gtgtcatttatttgc	CATGtGTAGtGCTGaaAAGTGtCTTTA	tgatag	ctgccttg
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Figure 295: CS=8.4



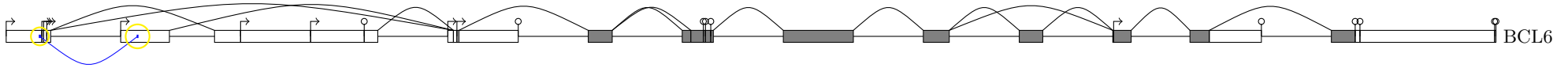
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R. Mac	aggatact	gtaacactttac...739...-cccgtaacaacgtgtcctcac	GGTGCCTTT	TTCAcGGAAGTGTTC	aatgacggcgagcgtgtgc---...186...aatgttgaaaa	gtcaagcg
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C. Por	aggatact	gtaacactttac...730...-cctgtacaacgtgtcctcac	GGTGCCTTT	TTCAcGGAAGTTTTC	atgatggcgagcgtgcgcc---...184...aatgttgaaaa	atcagctt
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E. Cab	aggatact	gtaacactttac...724...-acctgtacaacgtgtcct-ac	GGTGCCTTT	TTTCATGGAaGTTTTC	acgatggac--gagcgcgccat-...183...aatgttgaaaa	gtcaagtt
S. Sus	aggatact	gtaacactttac...729...-aattgtacaacgtgtcct-ac	GGTGCCTTT	TTTCATGGAaGTTTTC	acgggggac--gactgcgccat-...183...aatgttgaaaa	gtcaagtt
L. Afr	aggatact	gtaacactttac...746...-cctgtacaacgtgtcctcat	GGTGCCTTT	TTTCATGGAaGTTTTC	atgatggatgaacgcgcc---...185...aatattgaaaa	gtcaagtt
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id=329334 gene=ENSG00000113916 name=BCL6 segment=chr3_187439175_187440185_-1 type=E3 VIEW

Figure 296:



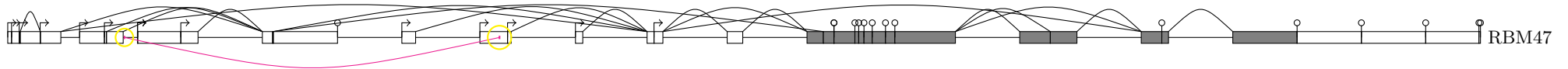
H.Sap	agcaggcc	ataccatcgtct...193..	agcagtggttaaagtccgaag	CTCAaaTTCCGaGAAT	tgagctctgttgat	tcttagaa
P.Tro	agcaggcc	ataccatcgtct...193..	agcagtggttaaagtccgaag	CTCAaaTTCCGaGAAT	tgagctctgttgat	tcttagaa
P.Abe	agcaggcc	ataccatcgtca...193..	agcagtggttaaagtccgaag	CTCAaaTTCCGaGAAT	tgagctctgttgat	tcttagaa
C.Jac	agcaggcc	agaccatcgtca...193..	agcagtggttaaagtccgaag	CTCAaaTTCCGaGAAT	tgagctctgttgat	tcttagaa
M.Mus	agcgggcg	gttccatcgggtg...189..	agcaatggtaaagcccgcag	CTCAaaTTCCGaGAAT	tgagctctgttgat	tcttagaa
R.Nor	agcgggcc	gttccatcgggtg...189..	agcaatggtaaagcccgcag	CTCAaaTTCCGaGAAT	tgagctctgttgat	tcttagaa
C.Por	agcgggcc	gtaccactttga...193..	agcagtggtgaagtcgag	CTCAaaTTCCGaGAAT	tgAGCTctgttgat	tcttagaa
O.Cun	agcaggcc	gtaccatcgtcc...193..	ggcagtggttaaagtcgag	CTCAaaTTCCGaGAAT	tgagctctgttgat	tcttagaa
C.Fam	agcgggcc	gtaccaccgagc...193..	agcagtggttaaagtcgag	CTCAaaTTCCGaGAAT	tgagctctgttgat	tcttagaa
F.Cat	agcaggct	gtaccaacgagc...193..	agcagtggttaaagtcgag	CTCAaaTTCCGaGAAT	tgagctctgttgat	tgtagaa
B.Tau	agcaggct	gtaccaccgacc...193..	agcagtggttaaagtcgag	CTCAaaTTCCGaGAAT	tgagctctgttgat	tcttagaa
E.Cab	agcaggcc	gtaccatcgtcc...193..	agcagtggttaaagtcgag	CTCAaaTTCCGaGAAT	tgagctctgttgat	tcttagaa
S.Sus	agcaggct	gtaccatcgtcc...193..	agcaatggtaaagtcgag	CTCAaaTTCCGaGAAT	tgagctctgttgat	tcttagaa
L.Afr	agcaggct	gtaccattattc...193..	agcagtggttaaagtcgag	CTCAaaTTCCGaGAAT	tgagctctgttgat	tcttagaa
	*** **	***	*** **	*****	*****	*****

id=329295 gene=ENSG00000113916 name=BCL6 segment=chr3.187463261.187463515.-1 type=E5

H.Sap	ggcagcga	tcttgccggctg--...74..	-----gcagagccgagattgactac	GTTCCGGGAaTGAG	agggctgtgtcattcccctc...196..	cctggaagacag	gtacggag
P.Tro	ggcagcga	tcttgccggctg--...75..	-----gcagagccgagattgactac	GTTCCGGGAaTGAG	agggctgtgtcattcccctc...190..	cctggaagacag	gtacggag
P.Abe	ggcagcga	tcttgccggctg--...75..	-----gcagagccgagattgactac	GTTCCGGGAaTGAG	agggctgtgtcattcccctc...195..	cctggaagacag	gtacggag
C.Jac	ggcagcga	tcttgccggctg--...74..	-----gcagagccgagattgactac	GTTCCGGGAaTGAG	agggctgtgtcattcccctc...201..	cctggaagacag	gtacggag
M.Mus	ggcagcga	tccggg--gctggg...74..	-----ttagagccgagattgactac	GTTCCGGGAaTGAG	agggctgtgtcattcccctc...202..	ccaggaagacag	gtacagct
R.Nor	accagcga	tcccgg--gctgga...74..	-----ttagagctgagattgactac	GTTCCGGGAaTGAG	agggctgtgtcattcccctc...204..	ccaggaagacag	gtacagct
C.Por	ggcagcga	tcccagcggccg--...68..	gaaatccgct--agcggagatcGGCTat	GTTCCGGGAaTGAG	agggctgtgtcattcccctc...215..	gcctggagccag	gtacgggg
O.Cun	ggcggcga	tcttgccggccg--...75..	-----gcagagccgagattgactac	GTTCCGGGAaTGAG	agggctgtgtcattcccctc...198..	tctggaggacag	gtacggtg
C.Fam	ggcggcga	tcttgccggccg--...75..	-----gctgagcggagattgactac	GTTCCGGGAaTGAG	agggctgtgtcattcccctc...168..	cctggcggcag	gtacggta
F.Cat	ggcagcga	tcttgccggccg--...75..	-----gctgagctgagattgactac	GTTCCGGGAaTGAG	agggctgtgtcattcccctc...210..	cctggcggcag	gtacggta
B.Tau	ggcagcga	tcttgctgccc--...74..	-----gctgagttgagattgactac	GTTCCGGGAaTGAG	agggctgtgtcattcccctc...192..	cctagcagacag	gtacggtg
E.Cab	ggcagcga	tcccggcggccg--...74..	-----gctgagctgagattgactac	GTTCCGGGAaTGAG	agggctgtgtcattcccctc...198..	tctggcagacag	gtacggtg
S.Sus	ggcagcga	tcttgccgactg--...73..	-----gctgagttgagattgactac	GTTCCGGGAaTGAG	agggctgtgtcattcccctc...208..	cctggcagacag	gtacagtg
L.Afr	cgcagcga	tcttgccggccg--...75..	-----gctgagccgagattgactac	GTTCCGGGAaTGAG	agggctgtgtcattcccctc...209..	cctggcggcag	gtactggg
	*** **	*** * * *	** ***** **	*****	*****	*****	*****

id=329300 gene=ENSG00000113916 name=BCL6 segment=chr3.187455385.187455732.-1 type=AN VIEW

Figure 297: CS=10.92



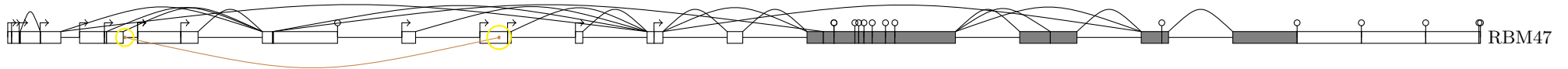
H. Sap	cagcaaa	gtatctgcgctc...94...tg	tgtgggagtaaaaatctgg	TTTG	GTGAGTt
R. Mac	cagcaaa	gtatctgcgctc...93...tg	tgtgggagtaaaaatctgg	TTTG	GTGAGTt
P. Tro	cagcaaa	gtatctgcgctc...94...tg	tgtgggagtaaaaatctgg	TTTG	GTGAGTt
P. Abe	cagcaaa	gtatctgcgctc...95...tg	tgtgggagtaaaaatctgg	TTTG	GTGAGTt
C. Jac	cagcaaa	gtatctgcgctc...95...tg	tgtgggactaaaatctgg	TTTG	GTGAGTt
M. Mus	cagctaa	gtatccgcgctt...92...tg	tgtgggagtaaaaatctgg	TTTG	GTGAGTt
R. Nor	cagttaa	gtatccgcgctg...92...tg	tgtgggagtaaaaatctgg	TTTG	GTGAGTt
C. Por	cagcggag	gcatctgcgccc...92...tg	tgtgggagtaaaaatctgg	TTTG	GTGAGTt
O. Cun	cggctaag	gtatccgtgctt...93...tg	tgtgggagtaaaaatctgg	TTTG	GTGAGTt
C. Fam	cagccaag	gtatctgcgctc...92...tg	tgtgggagtaaaaatctgg	TTTG	GTGAGTt
F. Cat	cagcaaa	gtatctgcgctc...92...tg	tgtgggagtaaaaatctgg	TTTG	GTGAGTt
B. Tau	cagcaaa	gtatctgcgctc...92...tg	tgtgggagtaaaaatctgg	TTTG	GTGAGTt
E. Cab	cagcaaa	gtatctgcgctc...92...tg	tgtgggagtaaaaatctgg	TTTG	GTGAGTt
O. Avi	cagcaaa	gtatctgcgctc...92...tg	tgtgggagtaaaaatctgg	TTTG	GTGAGTt
L. Afr	cagcaaa	gtatctgcgctc...92...tg	tgtgggagtaaaaatctgg	TTTG	GTGAGTt
	* * * *	* * * * *	* * * * *	* * * * *	* * * * *

id=188444 gene=ENSG00000163694 name=RBM47 segment=chr4_40631995_40632124_-1 type=A5

H. Sap	-tccccctt	aaggggaagtgt-...106...agcctgtttagtgtctcgta	AAACATTTA	CCAAA	agcactgagccatggttttt-...31...agagagcaagca	gggaaaga-
R. Mac	-tccccctt	aaggggaagtgt-...106...agcctgtttagtgtctcgta	AAACATTTA	CCAAA	agcactgagccatggttttg-...30...agagagcaagca	gggaaaga-
P. Tro	-tccccctt	aaggggaagtgt-...106...agcctgtttagtgtctcgta	AAACATTTA	CCAAA	agcactgagccatggttttt-...31...agagagcaagca	gggaaaga-
P. Abe	-tccccctt	aaggggaagtgt-...106...agcctgtttagtgtctcgta	AAACATTTA	CCAAA	agcactgagccatggttttg-...30...agagagcaagca	gggaaaga-
C. Jac	-accocctt	a-gggaaagtgtg...105...aggctgtttagtgtctcgta	AAACATTTA	CCAAA	agcactgagccatggttttg-...30...agagagccagcc	-gggaaaga
M. Mus	-cctttctt	aaaggggaagtat-...102...aggctgttcagtgtctcgta	AAACATTTA	CCAAA	agcactgagccatggttttg-...30...cgaggac-ggca	gggcagagt
R. Nor	-cctgtctt	acaggggaagtgt-...101...aggctgttcagtgtctcgta	AAACATTTA	CCAAA	agcactgagccatggttttg-...31...-gaggacgggca	ggggaaagc
C. Por	ttctgtccc	g-agggaaagtgt-...105...aggctgtttagtgtctcgta	AAACATTTA	CCAAA	g-cactgagccgtgggtttga...29...agagagcaagcc	gggcccag-
O. Cun	-ttcctctt	aaggggaagtgt-...106...aggctgtttagtgtctcgta	AAACATTTA	CCAAA	agcactgagccatggttttg-...30...agagagcgagcc	ggcgaagg-
C. Fam	-tccgcctt	aaggggaagtgt-...106...aggctgtttagtgtctcgta	AAACATTTA	CCAAA	agcactgagccatggttttg-...28...ggagagcgagcc	ggggaaag-
F. Cat	-tccgcctt	aaggggaagtgt-...106...gggctgtttagtgtctcgta	AAACATTTA	CCAAA	agcactgagccatggttttg-...30...agagagcaagcc	gaggaaag-
B. Tau	-tccccctt	aaggggaagtgt-...111...aggctgtttagtgtctcgta	AAACATTTA	CCAAA	agcactgagccagggtttt-...31...-gagagccagca	ggggaaagg
E. Cab	-tccccctt	aagaggaagtgt-...106...agactgtttagtgtctcgta	AAACATTTA	CCAAA	agcactgagccatgattttg-...31...-gagagcgagca	ggggaaagg
O. Avi	-tccccctt	aaggggaagtgt-...109...aggctgtttagtgtctcgta	AAACATTTA	CCAAA	agcactgagccagggtttt-...31...-gagagccagca	ggggaaagg
L. Afr	-ttcccttg	tgggggaagtgt-...106...aggctgtttagtgtctcgta	AAACATTTA	CCAAA	agcactgagccgtgggtttt-...30...agagaaggagcc	ggggaaag-
	*	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *

id=188456 gene=ENSG00000163694 name=RBM47 segment=chr4_40516561_40516775_-1 type=A5 VIEW

Figure 298:



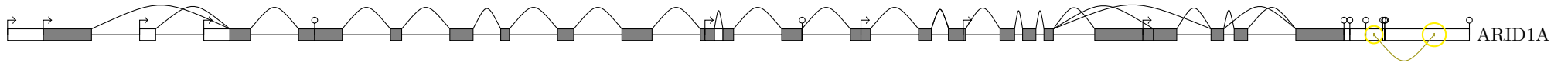
H. Sap	cTGGTTTG	GTGAGTTTA	GGGA	agggagtagacgagagacaa...65...-cgggaagggcc	gcagacta
R. Mac	cTGGTTTG	GTGAGTTTA	GGGA	agggagtagacgagacaaa...65...-cgggaagggcc	gcagacca
P. Tro	cTGGTTTG	GTGAGTTTA	GGGA	agggagtagaggagagacaa...65...-cgggaagggcc	gcagacta
P. Abe	cTGGTTTG	GTGAGTTTA	GGGA	agggagtagacgagagacaa...65...-cgggaagggcc	gcagacca
C. Jac	cTGGTTTG	GTGAGTTTA	GGGA	agggagtagacgagagacaa...65...-cgggaagggcc	gcagacca
M. Mus	cTGGTTTG	GTGAGTTTA	GGGA	agggagtatacagagacaacc...64...-agagcagggatt	gcagaggc
R. Nor	cTGGTTTG	GTGAGTTTA	GGGA	agggagtatacagagacaacc...64...-agagcagggatt	gcagaggc
C. Por	ctggTTTG	GTGAGTTTA	GGGA	agggagtagacgagacaacc...54...-cggaaggagcgc	gcggcgcg
D. Cun	cTGGTTTG	GTGAGTTTA	GGGA	agggagtagacgaggagaca...67...-cgggaggggctc	gcagacc
C. Fam	cTGGTTTG	GTGAGTTTA	GGGA	agggagtagacgagagacaa...64...-cgcgaggagctc	cgggacc
F. Cat	cTGGTTTG	GTGAGTTTA	GGGA	agggagtagacgagagacaa...64...-agggaagagctc	ggagagca
B. Tau	cTGGTTTG	GTGAGTTTA	GGGA	agggagtagacgagagacaa...59...cagggaaagagc-c	ggagccga
E. Cab	cTGGTTTG	GTGAGTTTA	GGGA	agggagtagacgagagacaa...64...-ggggaagagctc	ggagagac
O. Avi	ctggTTTG	GTGAGTTT	aagggaaggagtagacgag-----	...65...cagggaaagagc-c	ggagccga
L. Afr	cTGGTTTG	GTGAGTTTA	GGGA	agggagtatacagagagacaa...65...-cgggaaggagctc	agagatca
	*****	*****	*****	* **	* * *

id=188445 gene=ENSG0000163694 name=RBM47 segment=chr4_40631884_40631994_-1 type=I5

H. Sap	-tccccctt	aaggggaagtgt-...99...-ggacacaagcctgttagtg	TCTCg	TAAACATTTA	CCAAA	agcactgagccatgggtttt-...31...agagagcaagca	gggaaaga-
R. Mac	-tccccctt	aaggggaagtgt-...99...-ggacacaagcctgttagtg	TCTCg	TAAACATTTA	CCAAA	agcactgagccatgggtttt-...30...agagagcaagca	gggaaaga-
P. Tro	-tccccctt	aaggggaagtgt-...99...-ggacacaagcctgttagtg	TCTCg	TAAACATTTA	CCAAA	agcactgagccatgggtttt-...31...agagagcaagca	gggaaaga-
P. Abe	-tccccctt	aaggggaagtgt-...99...-ggacacaagcctgttagtg	TCTCg	TAAACATTTA	CCAAA	agcactgagccatgggtttt-...30...agagagcaagca	gggaaaga-
C. Jac	-accacctt	a-gggaaagtgt-...98...-ggacacaagcctgttagtg	TCTCg	TAAACATTTA	CCAAA	agcactgaaccatgggtttt-...30...agagagccagcc	-gggaaaga
M. Mus	-cctttctt	aaaggggaagtgt-...95...-ggtcgaaggctgttcagt	TCTCg	TAAACATTTA	CCAAA	agcactgagccatgggtttt-...30...cgaggac-ggca	gggcagagt
R. Nor	-cctgtctt	acaggggaagtgt-...94...-ggtcgaaggctgttcagt	TCTCg	TAAACATTTA	CCAAA	agcactgagccatgggtttt-...31...-gaggacgggca	ggggaagc
C. Por	ttctgtccc	g-aggggaagtgt-...98...-gggacaca-ggctgttagtg	TCTCg	TAAACATTTA	CCAAA	agcactgagccatgggtttt-...29...agagagcaagcc	gggagag-
D. Cun	-ttcctctt	aaggggaagtgt-...99...-ggaccgaaggctgttagtg	TCTCg	TAAACATTTA	CCAAA	agcactgagccatgggtttt-...30...agagagcagcc	ggcgaagg-
C. Fam	-tccgcctt	aaggggaagtgt-...99...-ggacacaagcctgttagtg	TCTCg	TAAACATTTA	CCAAA	agcactgagccatgggtttt-...28...ggagagcagcc	ggggaag-
F. Cat	-tccgcctt	aaggggaagtgt-...99...-ggacacaagcctgttagtg	TCTCg	TAAACATTTA	CCAAA	agcactgagccatgggtttt-...30...agagagcaagcc	gaggaag-
B. Tau	-tccccctt	aaggggaagtgt-...104...-ggacacaagcctgttagtg	TCTCg	TAAACATTTA	CCAAA	agcactgagccaggtttt-...31...-gagagccagca	ggggaagg
E. Cab	-tccccctt	aaggggaagtgt-...99...-ggacacaagcctgttagtg	TCTCg	TAAACATTTA	CCAAA	agcactgagccatgatttgg-...31...-gagagcagca	ggggaagg
O. Avi	-tccccctt	aaggggaagtgt-...109...-aggctgttagtgctcgtg	AAACatTTA	CCAAA	agcactgagccaggtttt-...31...-gagagccagca	ggggaagg	
L. Afr	-ttccctg	tgggggaagtgt-...99...-ggacgcaaggctgttagtg	TCTCg	TAAACATTTA	CCAAA	agcactgagccatgggtttt-...30...agagagcagcc	ggggaag-
	*	* **** *		* *****	*****	***** * * **	*** **

id=188456 gene=ENSG0000163694 name=RBM47 segment=chr4_40516561_40516775_-1 type=A5 VIEW

Figure 299:



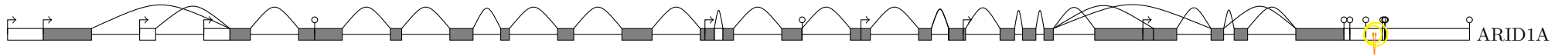
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R. Mac	tcccctca	ggaccccacccc...37...gactttttttatTTtaaccaAAGTtaCTGTtGTTT	acagt	gagtttggggaaaaa...61...gtttttaatggt	aaaaaaga--
P. Tro	cccctca	ggaccctacccc...37...gactttttttatTTtaaccaAAGTtaCTGTtGTTT	acagt	gagtttggggaaaaa...60...gtttttaatggt	aaaaaaa--
P. Abe	tcccctca	ggaccccacccc...37...gactttttttatTTtaaccaAAGTtaCTGTtGTTT	acagt	gagtttggggaaaaa...59...gtttttaatggt	aaaaaaa--
C. Jac	tcccctca	ggaccccacccc...39...gactttttttatTTtaaccaAAGTtaCTGTtGTTT	acagt	gagtttggggaaaaa...57...--ttttaatggt	taaaaaaaa
M. Mus	ttccctca	ggaccccacccct...31...agactttttttatTTtaaccaAAGTtaCTGTtGTTT	acagt	gagtttggggaaaaa...48...gtttttaatggt	taaaaaaa--
R. Nor	ttccctca	ggaccccacccctg...28...agactttttttatTTtaaccaAAGTtaCTGTtGTTT	acagt	gagtttggggaaaaa...51...gtttttaatggt	taaaaaaa--
C. Por	ttccctca	ggaccccactat...32...ctttttttttatTTtaaccaAAGTtaCTGTtGTTT	acagt	gagtttggggaaaaa...55...gtttttaatggt	aaaaaaga--
O. Cun	accctca	ggaccccacccct...32...gactttttttatTTtaaccaAAGTtaCTGTtGTTT	acagt	gagtttggggaaaaa...59...gtttttaatggt	taaaaaaa--
F. Cat	tcccctca	ggaccccacccct...31...agactttttttatTTtaaccaAAGTtaCTGTtGTTT	acagt	gagtttggggaaaaa...65...gtttttaatggt	aaaaaaa--
B. Tau	tcccctca	ggaccctgcct...32...gactttttttatTTtaaccaAAGTtaCTGTtGTTT	acagt	gagtttggggaaaaa...60...gtttttaatggt	taaaaaaa--
E. Cab	cccctca	ggaccccacccct...31...agactttttttatTTtaaccaAAGTtaCTGTtGTTT	acagt	gagtttggggaaaaa...59...gtttttaatggt	aaaaaaa--
O. Avi	tcccctca	ggaccctgcct...32...gactttttttatTTtaaccaAAGTtaCTGTtGTTT	acagt	gagtttggggaaaaa...61...gtttttaatggt	taaaaaaa--
L. Afr	tcccctca	ggtccccaccct...31...agactttttttatTTtaaccaAAGTtaCTGTtGTTT	acagt	gagtttggggaaaaa...59...gtttttaatggt	aaaaaaa--
	*****	** *** *	*****	*****	*****

id=108395 gene=ENSG00000117713 name=ARID1A segment=chr1_27107475_27107650_1 type=E3

H. Sap	--caaaaaaa	aa-----ttctgaagga--..506...ttggtgacctgcacaaagcgAGACACAGctATTT	aatctcttgccagatatcgc...333...aatcttggttaa	gacttttg
R. Mac	caaaaaaaa	aa-----ttctgaag--...507...ttggtgacctgcacaaagcgAGACACAGctATTT	aatctcttgccagacatcgc...333...aatcttggttaa	gacttttg
P. Tro	--caaaaaaa	aa-----ttctgaagga--..507...ttggtgacctgcacaaagcgAGACACAGctATTT	aatctcttgccagacatcgc...333...aatcttggttaa	gacttttg
P. Abe	--aaaaaaa	aa-----ttctgaagga--..506...ttggtgacctgcacaaagcgAGACACAGctATTT	aatctcttgccagacatcgc...338...aatcttggttaa	gacttttg
C. Jac	----caaaaa	aa-----aactgaaggaca...501...ttggtgacctgcacaaagcgAGACACAGctATTT	aatctcttgccagacatcgc...334...aatcttggttaa	gacttttg
M. Mus	--gaaaaaaa	aa-----tcaaaaaaaa--..511...ttggtgacctgcacaaagcgAGACACAGctATTT	aatctcttgccagacattgc...336...aatcttggttaa	gacttttg
R. Nor	--tacaaaaa	aa-----ccctgaagga--..501...ttggtgacctgcacaaagcgAGACACAGctATTT	aatctcttgccagacgtcgc...334...aatcttggttaa	gacttttg
C. Por	----caaaaa	aa-----acctgaaggaca...503...ttggtgacctgcacaaagcgAGACACAGctATTT	aatctcttgccagacatcac...337...aatcttggttaa	gacttttg
O. Cun	--caaaaaaa	aa-----ctctgaagga--..504...ttggtgacctgcacaaagcgAGACACAGctATTT	aatctcttgccagacatcgc...334...aatcttggttaa	gacttttg
F. Cat	--caaaaaaa	aaaaaaaccctc-----..520...ttggtgacctgcacaaagcgAGACACAGctATTT	aatctcttgccagacatcgc...335...aatcttggttaa	gacttttg
B. Tau	--caaaaaaa	aa-----tctgaagga--..511...ttggtgacctgcacaaagcgAGACACAGctATTT	aatctcttgccagacatcgc...336...aatcttggttaa	gacttttg
E. Cab	--caaaaaaa	aa-----ccctgaagga--..509...ttggtgacctgcacaaagcgAGACACAGctATTT	aatctcttgccagacatcgc...334...aatcttggttaa	gacttttg
O. Avi	--caaaaaaa	aa-----ccctagaagg--..510...ttggtgacctgcacaaagcgAGACACAGctATTT	aatctcttgccagacatgcc...332...aatcttggttaa	gacttttg
L. Afr	--caaaaaaa	aaaaa--cctctga-----..521...ttggtgacctgcacaaagcgAGACACAGctATTT	aatctcttgccagacatcgc...332...aatcttggttaa	gacttttg
	*****	**	*****	*****

id=108398 gene=ENSG00000117713 name=ARID1A segment=chr1_27107679_27108595_1 type=E3 VIEW

Figure 300:



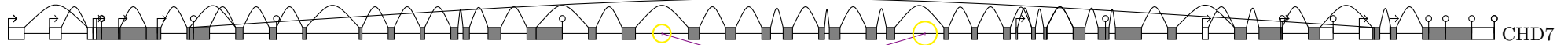
H. Sap	tcccctca	ggacccta--cccaccctctttgaaaagacaagctctgcctacatagaagacttt--TTTTATTTaaCCAAA	TTACTGT	gtttacagt	gagtttgggg..65..gttttaatggt	aaaaaaa--
R. Mac	tcccctca	ggacccta--cccaccctctttgaaaagacaagctctgcctacatagaagacttt--TTTTATTTaaCCAAA	TTACTGT	gtttacagt	gagtttgggg..66..gttttaatggt	aaaaaaga--
P. Tro	ccccctca	ggacccta--cccaccctctttgaaaagacaagctctgcctacatagaagacttt--TTTTATTTaaCCAAA	TTACTGT	gtttacagt	gagtttgggg..65..gttttaatggt	aaaaaaa--
P. Abe	tcccctca	ggacccta--cccaccctctttgaaaagacaagctctgcctacatagaagacttt--TTTTATTTaaCCAAA	TTACTGT	gtttacagt	gagtttgggg..64..gttttaatggt	aaaaaaa--
C. Jac	tcccctca	ggaccctacccccaccctctttgaaaagacaagctctgcctacatagaagacttt--TTTTATTTaaCCAAA	TTACTGT	gtttacagt	gagtttgggg..62..--tttaatggt	taaaaaaaa
M. Mus	ttccctca	gga-----cccaccctatttgaaaagacaagctctgcctacatagaagacttt--TTTTATTTaaCCAAA	TTACTGT	gtttacagt	gagtttgggg..53..gttttaatggt	taaaaaaa--
R. Nor	ttccctca	gga-----cccaccctgtt--gaaagacaagctctgcctacatagaagac--TTTTATTTaaCCAAA	TTACTGT	gtttacagt	gagtttgggg..56..gttttaatggt	taaaaaaa--
C. Por	ttccctca	gga-----cccctaatttgaaaagacaagctctgcctacatagaagactTTTTTTATTTaaCCAAA	TTACTGT	gtttacagt	gagtttgggg..60..gttttaatggt	taaaaaaa--
O. Cun	accctca	gga-----cccaccctatttgaaaagacaagctctgcctacatagaagacttt--TTTTATTTaaCCAAA	TTACTGT	gtttacagt	gagtttgggg..64..gttttaatggt	taaaaaaa--
F. Cat	tcccctca	gga-----cccaccctgttggaaaagacaagctctgcctacatagaagacttt--TTTTATTTaaCCAAA	TTACTGT	cgttacagt	gagtttgggg..70..gttttaatggt	aaaaaaa--
B. Tau	tcccctca	gga-----ccctgcctatttgaaaagacaagctctgcctacatagaagacttt--TTTTATTTaaCCAAA	TTACTGT	cgttacagt	gagtttgggg..65..gttttaatggt	taaaaaaa--
E. Cab	ccccctca	gga-----cccaccctatttgaaaagacaagctctgcctacatagaagacttt--TTTTATTTaaCCAAA	TTACTGT	cgttacagt	gagtttgggg..64..gttttaatggt	aaaaaaa--
O. Avi	tcccctca	gga-----ccctgcctatttgaaaagacaagctctgcctacatagaagacttt--TTTTATTTaaCCAAA	TTACTGT	gtttacagt	gagtttgggg..66..gttttaatggt	taaaaaaa--
L. Afr	tcccctca	ggt-----cccaccctgttggaaaagacaagctctgcctacatagaagact--TTTTATTTaaCCAAA	TTACTGT	cgttacagt	gagtttgggg..64..cttttaatggt	aaaaaaa--
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id=108395 gene=ENSG00000117713 name=ARID1A segment=chr1.27107475_27107650_1 type=E3

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R. Mac	tcccctca	ggaccctacccc..52..aaccaagttactgttgtttACAGTGAgTTGGggAAAAAAAA	-----	taaaat-aaaaatggctttcc-----	..37..gttttaatggt	aaaaaaga--
P. Tro	ccccctca	ggaccctacccc..52..aaccaagttactgttgtttACAGTGAgTTGGggAAAAAAAA	-----	taaaat-aaaaatggctttcc-----	..37..gttttaatggt	aaaaaaa--
P. Abe	tcccctca	ggaccctacccc..52..aaccaagttactgttgtttACAGTGAgTTGGggAAAAAAAA	-----	taaaat-aaaaatggctttcc-----	..37..gttttaatggt	aaaaaaa--
C. Jac	tcccctca	ggaccctacccc..54..aaccaagttactgttgtttACAGTGAgTTGGggAAAAAAAA	-----	t-aaaaatggctttccagtc-----	..34..--ttttaatggt	taaaaaaaa
M. Mus	ttccctca	ggaccctacccc..46..aaccaagttactgttgtttACAGTGAgTTGGggAAAAAAAA	-----	tgctttcccgatccttgca..26..gttttaatggt	taaaaaaa--	taaaaaaa--
R. Nor	ttccctca	ggaccctacccc..43..aaccaagttactgttgtttACAGTGAgTTGGggAAAAAAAA	-----	tgctttcccgatccttgca..26..gttttaatggt	taaaaaaa--	taaaaaaa--
C. Por	ttccctca	ggaccctacccc..47..aaccaagttactgttgtttACAGTGAgTTGGggAAAAAAAA	AAAAA	-----	tgctttcccgatccttgca..26..gttttaatggt	aaaaaaga--
O. Cun	accctca	ggaccctacccc..47..aaccaagttactgttgtttACAGTGAgTTGGggAAAAAAAA	-----	taaaat-aaaactggctttcc-----	..37..gttttaatggt	taaaaaaa--
F. Cat	tcccctca	ggaccctacccc..46..aaccaagttactgttgtttACAGTGAgTTGGggAAAAAAAA	taaaat	aaaaatggc-----	..42..gttttaatggt	aaaaaaa--
B. Tau	tcccctca	ggaccctacccc..47..aaccaagttactgttgtttACAGTGAgTTGGggAAAAAAAA	-----	taaaat-aaaaatggctttcc-----	..37..gttttaatggt	taaaaaaa--
E. Cab	ccccctca	ggaccctacccc..46..aaccaagttactgttgtttACAGTGAgTTGGggAAAAAAAA	-----	taaaat-aaaaatggctttcc-----	..37..gttttaatggt	aaaaaaa--
O. Avi	tcccctca	ggaccctacccc..47..aaccaagttactgttgtttACAGTGAgTTGGggAAAAAAAA	-----	taaaataaaaatggctttcc-----	..38..gttttaatggt	taaaaaaa--
L. Afr	tcccctca	ggtccccaccct..46..aaccaagttactgttgtttACAGTGAgTTGGggAAAAAAAA	-----	taaaat-aaaaatggctttcc-----	..35..cttttaatggt	aaaaaaa--
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id=108395 gene=ENSG00000117713 name=ARID1A segment=chr1.27107475_27107650_1 type=E3 VIEW

Figure 301:



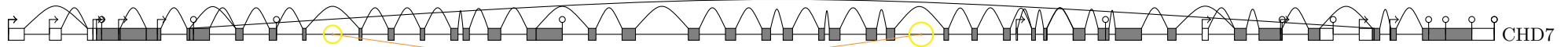
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R. Mac	tattaatg	gtaagcctgctc...4948...-----attcacgttatgctgtccaa	TCTCTGc	AGGTGcTG	-----	:::::	-----a
P. Tro	tatcaatg	gtaaggctgcc...4661...tggttgtttctgccaacttc-----	TGGCTTga	CAGTCTGTTGTT	-----	:::::agtattcacgttatgctgtccaatctctgcag	gtgctgaa
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C. Jac	tatcaatg	gtaagtgtgcc...4948...-----attcacattatgctgtccaa	TCTCTGc	AGGTGcTG	-----	:::::	-----a
M. Mus	aatcaatg	gtaagcctgctc...4186...-----ttcgacacctatggcctaa	-----	CAGTCTGTTGTT	-----	:::::agtattcacgtcatgccatccaatctctgcag	gtgctgaa
R. Nor	aatcaatg	gtaagcctgccc...4503...-----gtttgggtgattcaaggcag	-----	CAGTCTGTTTg	TGTTTTA	ctcagcagacaccccccttctctgcaattcaggctctaga	gtgctgaa
C. Por	aatcaatg	gtaagtgtgca...4948...-----attcacattatgctgtccaa	TCTCTGc	AGGTGcTG	-----	:::::	-----a
O. Cun	tatcaatg	gtgagtctgctc...4671...-----ttctgccacttctgacttga	-----	CAGTCTGTTGTT	-----	:::::agtattcacgttatgctgtccaatctctgcag	gtgctgaa
C. Fam	tattaacg	gtaagcctatgc...4656...tggttgtttctgccaacttc-----	TGGCTTga	CAGTCTGTTGTT	-----	:::::agtattcacgttatgctgtccaatctctgcag	gtgctgaa
F. Cat	tattaacg	gtaagcctgctc...4649...tggttgtttctgccaacttc-----	TGGCTTga	CAGTCTGTTGTT	-----	:::::agtattcacgttatgctgtccaatctctgcag	gtgctgaa
B. Tau	tatcaacg	gtaagcctggca...4652...-----tctgccacttctagctctga	-----	CAGTCTGTTGTT	-----	:::::agtattccgttatgctgtccaatctctgcag	gtgctgaa
E. Cab	tattaatg	gtaagcctgctc...4662...tggttgtttctgccaacttc-----	TGGCTTga	CAGTCTGTTGTT	-----	:::::agtattcacgttatgctgtccaatctctgcag	gtgctgaa
S. Sus	gatcaacg	gtaagctgtata...4662...gcttgtttctgccaacttcta	-----	GCTTga	CAGTCTGTTGTT	-----	:::::agtattccgttatgctgtccaatctctgcag
O. Avi	tatcaacg	gtaagcctggct...4651...gcttgtttctgccaacttcta	-----	GCTTga	CAGTCTGTTGTT	-----	:::::agtattccgttatgctgtccaatctctgcag
L. Afr	tattaatg	gtaagcctgccc...4665...tggttgtttctgccaacttc-----	TGGCTTga	CAGTCTGTTGTT	-----	:::::agtattcacattgctgtccaatctctgcag	gtgctgaa
	** * * *	** * *		***			*

id=534387 gene=ENSG00000171316 name=CHD7 segment=chr8_61743137_61748631.1 type=IN

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R. Mac	tgtaacaa	gtagtattatag...2727...tcagttgtttacaaacttgc	TTCAa	TACTTCAGAGG	-----	caatggtagggtacgtgtct	-----	...280...cttctctccag	ggtcctgc		
P. Tro	tgtaacaa	gtagtattatag...2697...gaaatttatgagataatga	---AGC	agaACAG	ttACTG	aAAGCCA	tctgctcagt	---tg	ttacaaa...321...cttctctccag	ggtcctgc	
P. Abe	tgtaacaa	gtagtattatag...2698...gaaatttatgagataatga	---AGC	agaACAG	ttACTG	aAAGCCA	tctgctcagt	---tg	ttacaaa...321...cttctctccag	ggtcctgc	
C. Jac	tgtaacaa	gtagtattatag...3713...tcagttgtttacaaacttgc	TTCAa	TACTTCAGAGG	-----	caatggtagggtacgtgtct	-----	...280...cttctctccag	ggtcctgc		
M. Mus	tgcaacaa	gtaggtaccagg...2771...gaaatttatgagataatga	---AGC	agaACAG	ttACTG	aaagccatctgctcggt	---tg	-----	...328...cttctctccag	ggtcctgc	
R. Nor	tgcaacaa	gtaggtaccagg...2795...gaggaatttatgagataa	---TGA	AAGCAGA	ACAGT	ttACTG	aaagccatctgctcggt	---tg	-----	...328...cttctctccag	ggtcctgc
C. Por	tgcaacaa	gtagtctctgg...3692...tcagttgtttacaaacttgc	TTCAa	TACTTCAGAGG	-----	caatggtagggtacgtgtct	-----	...278...cttctctccag	ggtcctgc		
D. Cun	tgtaacaa	gtacgtgaccag...4008...gaaatttatgagataatga	---AGC	agaACAG	ttACTG	aaagccatctgctcagt	---tg	-----	...326...cttctctccag	ggtcctgc	
C. Fam	tgtaataa	gtacgtcttgaa...3502...gaaatttatgagataatga	---AGC	agaACAG	ttACTG	aAAGCCA	tctgctcagt	---tg	ttacaaa...321...cttctctccag	ggtcctgc	
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B. Tau	tgcaacaa	gtacgtcagggg...3984...gaaatttatgagataatga	---AGC	agaACAG	ttACTG	aaagccatctgctcagt	---tg	-----	...329...cttctctccag	ggtcctgc	
E. Cab	tgcaacaa	gtgcgtcctgaa...3703...gaaatttatgagataatga	---AGC	agaACAG	ttACTG	aAAGCCA	tctgctcagt	---tg	ttacaaa...316...cttctctccag	ggtcctgc	
S. Sus	tgcaacaa	gtacgtggggcg...4159...gaaatttatgagataatga	---AGC	agaACAG	ttACTG	aaagccatctgctcagt	---tg	ttaca...319...cttctctccag	ggtcctgc		
U. Avi	tgcaacaa	gtacgtcagggg...4008...gaaatttatgagataatga	---AGC	agaACAG	ttACTG	aaagccatctgctcagt	---tg	ttaca...323...cttctctccag	ggtcctgc		
L. Afr	tgcaacaa	gtgcgtggagcg...3265...gaaatttatgagataatga	---AGC	agaACAG	ttACTG	aAAGCCA	tctgctcagt	---tg	ttacaaa...319...cttctctccag	ggtcctgc	
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id=534403 gene=ENSG00000171316 name=CHD7 segment=chr8_61757969_61761073.1 type=IN VIEW

Figure 304: CS=4.8



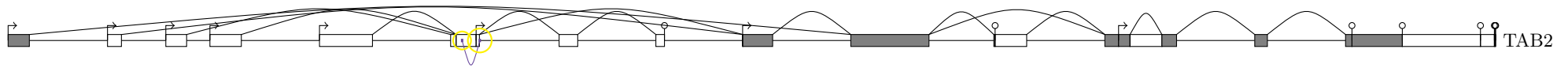
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R. Mac	aaaagcag	gtgagtccatt...4676...-----ggcagaagccaaatttggg	GTCAGG	ttGTTGTGAATgAAGC	-tgcattgtggttagggaggag...227...cttttgttcag	aaggaatc	
P. Tro	aaaagcag	gtgagtccatt...4676...-----ggcagaagccaaatttggg	GTCAGG	ttGTTGTGAATgAAGC	-tgcattgtggttagggaggag...227...cttttgttcag	aaggaatc	
P. Abe	aaaagcag	gtgagtccatt...4676...-----ggcagaagccaaatttggg	GTCAGG	ttGTTGTGAATgAAGC	-agcatgtggttagggaggag...227...cttttgttcag	aaggaatc	
C. Jac	aaaagcag	gtgagcatcatt...4690...-----ggcagaagccaaatttggg	GTCAGG	ttGTTGTGAATgAAGC	-tgcattgtggttagggaggag...213...cttttgttcag	aaggaatc	
M. Mus	aaaagcag	gtgagcggcgc...4691...-----ggcagccagccagccttggg	GTCAGG	ttGTTGTGAATgAAGC	-tgcattgtggttagggaggag...212...ctttcattcag	aaggaatc	
R. Nor	aaaagcag	gtgagtccacg...4687...-----ggcagaagccaggttggg	GTCAGG	ttGTTGTGAATgAAGC	-tgcattgtggttagggaggag...216...cttttgttcag	aaggaatc	
C. Por	aaaagcag	gtaagcgcatt...4589...-----ggcggaaagccagatttggg	GTCAGG	ttGTTGTGAATgAAGC	-tgcattgtggttagggaggag...314...cttttgttcag	aaggaatc	
O. Cun	aaaagcag	gtaagcacttt...4693...-----ggcagaatgccagatttggg	GTCAGG	ttGTTGTGAATgAAGC	-tgcgtgtggttagggaggag...210...cttttgttcag	aaggaatc	
C. Fam	aaaaacag	gtaagcgcact...4681...-----ggcagagaccaaatttggg	GTCAGG	ttGTTGTGAATgAAGC	-tgcattgtggttagggaggag...222...cttttgcctcag	aaggactc	
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B. Tau	aaaaacag	gtaagcgcctg...4638...attggctgctgcctgcgaaa-----	ATGGTA	caCTTGCGGT	ctacttaacactgtgggttt...271...cctctgttcag	aaggaatc	
E. Cab	aaaaacag	gtaagcaccatt...4681...-----ggcagaagccaaatttggg	GTCAGG	ttGTTGTGAATgAAGC	-tgcattgtggttagggaggag...222...cttttgttcag	aaggaatc	
S. Sus	aaaaacag	gtaagcaccatt...4693...-----ggcagagaccagcttggg	GTCAGG	TTGTTGTGAATgAAGC	-tgcgtgtggttagggaggag...210...cttttgttcag	aaggaatc	
O. Avi	aaaaacag	gtaagcggccat...4694...-----ggcagaagccagatttggg	GTCAGG	ttGTTGTGAATgAAGC	-tgcattgtggttagggaggag...209...cctctgttcag	aaggaatc	
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id=534368 gene=ENSG00000171316 name=CHD7 segment=chr8_61714153_61720775_1 type=IN

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R. Mac	tgtaacaa	gtatgttattag...2602...aaaaccagattttatatctc	GTTTATTG	ctACAACtTCTGAT	gtgcttcacaaatggtatt...399...cttcctctccag	ggtcctgc		
P. Tro	tgtaacaa	gtatgttattag...2620...aaaaccagattttatatctc	GTTTATTG	ctACAACtTCTGAT	gtgcttcacaaatggtatt...399...cttcctctccag	ggtcctgc		
P. Abe	tgtaacaa	gtatgttattag...2621...aaaaccagattttatatctc	GTTTATTG	ctACAACtTCTGAT	gtgcttcacaaatggtatt...399...cttcctctccag	ggtcctgc		
C. Jac	tgtaacaa	gtatgttattag...3588...aaaaccagattttatatctc	GTTTATTG	ctACAACtTCTGAT	gtgcttcacaaatggtatt...399...cttcctctccag	ggtcctgc		
M. Mus	tgcaacaa	gtaggtaccagg...2694...aaaaccagattttatatctc	GTTTATTG	ctACAACtTCTGAT	gtgcttcacaaatggtatt...399...cttcctctccag	ggtcctgc		
R. Nor	tgcaacaa	gtaggtaccagg...2721...aaaaccagattttatatctc	GTTTATTG	ctACAACtTCTGAT	gtgcttcacaaatggtatt...399...cttcctctccag	ggtcctgc		
C. Por	tgcaacaa	gtatgtctctgg...3567...aaaaccagattttatatctc	GTTTATTG	ctACAACtTCTGAT	gtgcttcacaaatggtatt...397...cttcctctccag	ggtcctgc		
O. Cun	tgtaacaa	gtacgtgaccag...3931...aaaaccagattttatatctc	GTTTATTG	ctACAACtTCTGAT	gtgcttcacaaatggtatt...397...cttcctctccag	ggtcctgc		
C. Fam	tgtaataa	gtacgtcttgaa...3425...aaaaccagattttatatctc	GTTTATTG	ctACAACtTCTGAT	gtgcttcacaaatggtatt...399...cttcctctccag	ggtcctgc		
F. Cat	tgcaataa	gtatgttgccaa...4330...aaaaccagattttatatctc	GTTTATTG	CTCCGACAACtTCTGAT	gtgcttcacaaatggtatt...400...cttcctctccag	ggtcctgc		
B. Tau	tgcaacaa	gtacgtcagga...4221...attatgtggcaccatctgtc	ACGGT	ctCAAGccTACCAT	acagcatggctaatacagcct...90...ctcctctccag	ggtcctgc		
E. Cab	tgcaacaa	gtgctgcctgaa...3626...aaaaccagattttatatctc	GTTTATTG	ctACAACtTCTGAT	gtgcttcacaaatggtatt...394...cttcctctccag	ggtcctgc		
S. Sus	tgcaacaa	gtacgtggggcg...4082...aaaaccagattttatatctc	GTTTATTG	CTCCGACAACtTCTGAT	gtgcttcacaaatggtatt...395...cttcctctccag	ggtcctgc		
O. Avi	tgcaacaa	gtacgtcagga...3931...aaaaccagattttatatctc	GTTTATTG	ctACAACtTCTGAT	gtgcttcacaaatggtatt...399...ctcctctccag	ggtcctgc		
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id=534403 gene=ENSG00000171316 name=CHD7 segment=chr8_61757969_61761073_1 type=IN VIEW

Figure 305: CS=4.5



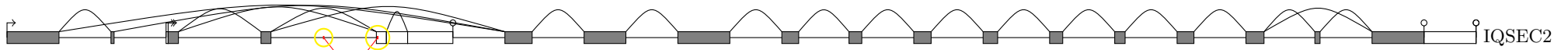
H.Sap	ctttcaag	gctccagaccagttcctggacc	TGCCcTGGAAAAGAAG	tatccgtagagatgagctc	---.57...gaacagctacaa	tttgaatt
R.Mac	ctttcaag	gctccagaccagttcctggacc	TGCCcTGGAAAAGAAG	tatccttagagatgagctc	---.57...gaacagctacaa	tttgaatt
P.Tro	ctttcaag	gctccagaccagttcctggacc	TGCCcTGGAAAAGAAG	tatccgtagagatgagctc	---.57...gaacagctacaa	tttgaatt
P.Abe	ctttcaag	gctccagaccagttcctggacc	TGCCcTGGAAAAGAAG	tatccttagagatgagctc	---.57...gaacagctacaa	tttgaatt
C.Jac	ctttcaag	gctccagaccagttcctggacc	TGCCcTGGAAAAGAAG	tatccgtagagatgagctc	---.57...gaacagctacag	tttgaatt
C.Por	ctttcaag	gctccagaccagttcctggacc	TGCCcTGGAAAAGAAG	tatccgtagagatgagctc	---.57...gaacagctacaa	tttgaatt
O.Cun	ctttcaag	gctccagaccagttcctggacc	TGCCcTGGAAAAGAAGGAT	ccagtagagatgagctcact	.54...gaacagctacag	tttgaatt
C.Fam	ctttcaag	gctccagaccagttcctggacc	TGCCcTGGAAAAGAAG	tatccagtagagatgagctc	---.57...gaacagctacaa	tttgaatt
F.Cat	ctttcaag	gctccagaccagttcctggacc	TGCCcTGGAAAAGAAG	tatccgtagagatgagctc	---.57...gaacagctacaa	tttgaatt
B.Tau	ctttcaag	gctccagaccagttcctggacc	TGCCcTGGAAAAGAAG	tatccagtagagatgagctc	---.57...gaacagctacca	tttgaatt
E.Cab	ctttcaag	gctccagaccagttcctggacc	TGCCcTGGAAAAGAAG	tatccagtagagatgagctc	---.57...ggacagctacaa	tttgaatt
S.Sus	ctttcaag	gctccagaccagttcctggacc	TGCCcTGGAAAAGAAG	tatccagtagagatgagctc	---.57...gaacagctacca	tttgaatt
L.Afr	ctttcaag	gctccagaccagttcctggacc	TGCCcTGGAAAAGAAG	tatccagtagagatgagctc	---.57...gaacagctacaa	tttgaatt
*****	*****	*****	*****	*****	* *****	*****

id=548805 gene=ENSG0000055208 name=TAB2 segment=chr6_149663821_149663948.1 type=AN

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R.Mac	agctacaa	tttgaatt	TTTCTaTTCCAG	GTAtgcta
P.Tro	agctacaa	tttgaatt	TTTCTaTTCCAG	GTAtgcta
P.Abe	agctacaa	tttgaatt	TTTCTaTTCCAG	GTAtgcta
C.Jac	agctacag	tttgaatt	TTTCTaTTCCAG	GTAtgcta
C.Por	agctacaa	tttgaatt	TTTCTaTTCCAG	GTAtgcta
O.Cun	agctacag	tttga	TTTTTCTaTTCCAG	GTAtgcta
C.Fam	agctacaa	tttgaatt	TTTCTaTTCCAG	GTAtgcta
F.Cat	agctacaa	tttgaatt	TTTCTaTTCCAG	GTAtgcta
B.Tau	agctacca	tttgaatt	TTTCTaTTCCAG	GTAtgcta
E.Cab	agctacaa	tttgaatt	TTTCTaTTCCAG	GTAtgcaa
S.Sus	agctacca	tttgaatt	TTTCTaTTCCAG	GTAtgcta
L.Afr	agctacaa	tttgaatt	TTTCTaTTCCAG	GTAtgcta
*****	*****	*****	*****	* *****

id=548806 gene=ENSG0000055208 name=TAB2 segment=chr6_149663949_149663969.1 type=AN VIEW

Figure 306:



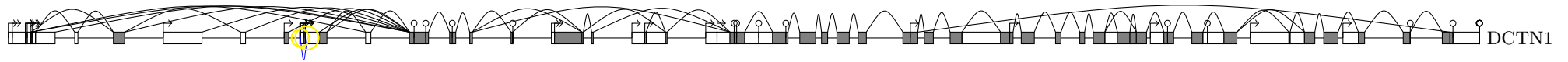
H. Sap	gagagcag	gtaagagctaga...4897...ccctgctctgcaaactaat	CCTCTgCCTCTCTCTG	tcaccacc-gcctgtggcctctacccgccttctggccccag	ggaagagg
R. Mac	gagagcag	gtaagagctaga...4897...ccctgctctgcaaactaat	CCTCTgCCTCTCTCTG	tcaccgcc-gcctgtggcctctacccgccttctggccccag	ggaagagg
P. Abe	gagagcag	gtaagagctaga...4897...ccctgctctgcaaactaat	CCTCTgCCTCTCTCTG	tcaccacc-gcctgtggcctctacccgccttctggccccag	ggaagagg
M. Mus	gagagcag	gtaagagctaga...4898...cccttctctgcaaactaat	TCTCTgCCTCTCTCTG	tcacc--cctgcctgtggcctctacccgccttctggccccag	ggaagagg
R. Nor	gagagcag	gtaagagctaga...4898...cccttctctgcaaactaat	TCTCTgCCTCTCTCTG	tcacc--cctgcctgtggcctctacccgccttctggccccag	ggaagagg
C. Por	gagagcag	gtaagagctaga...4897...ccctgctctgcaaactaat	CCTCTgCCTCTCTCTG	tcaccact-gcctgtggcctctaccttgccttctggccccag	ggaagagg
O. Cun	gagagcag	gtaagagctaga...4897...ccctgctctgcaaactaat	CCTCTgCCTCTCTCTG	tcaccgcc-gcctgtggcctctacccgccttctggccccag	ggaagagg
C. Fam	gagagcag	gtaagagctaga...4896...ccctgctctgcaaactaat	CCTCTgCCTCTCTCTG	tcaccgcc-gcctgtggcctctacccgccttctggccccag	ggaagagg
F. Cat	gagagcag	gtaagagctaga...4896...ccctgcttgcгааactaat	CCTCTgCCTCTCTCTG	tcaccacctgcctgtggcctctacccgccttctggccccag	ggaagagg
B. Tau	gagagcag	gtaagagctaga...4897...ccctgctctgcaaactaat	CCTCTgCCTCTCTCTG	tcaccgcc-gcctgtggcctctacccgccttctggccccag	ggaagagg
S. Sus	gagagcag	gtaagagctaga...4897...ccctgctctgcaaactaat	CCTCTgCCTCTCTCTG	tcaccgcc-gcctgtggcctctacccgccttctggccccag	ggaagagg
O. Avi	gagagcag	gtaagagctaga...4897...ccctgctctgcaaactaat	CCTCTgCCTCTCTCTG	tcaccgcc-gcctgtggcctctacccgccttctggccccag	ggaagagg
L. Afr	gagagcag	gtaagagctaga...4897...ccctgctctgcaaactaat	CCTCTgCCTCTCTCTG	tcaccacc-acctgtggcctctacccgccttctgacccag	ggaagagg
	*****	*****	*****	*****	*****

id=603037 gene=ENSG00000124313 name=IQSEC2 segment=chrX.53296247.53308745_-1 type=IN

H. Sap	ggcccCAG	GGAaGAGGaGGAGG	aggaggagactgaggaagag...50...tccctcctctcg	gtaactga
R. Mac	ggcccCAG	GGAaGAGGaGGAGG	aggaggagactgaggaagag...50...tccctcctctcg	gtaactga
P. Abe	ggcccCAG	GGAaGAGGaGGAGG	aggaggagactgaggaagag...50...tccctcctctcg	gtaactga
M. Mus	ggcccCAG	GGAaGAGGaGGAGG	aggaggaaactgaggaagag...50...tccctcctctcg	gtaactga
R. Nor	ggcccCAG	GGAaGAGGaGGAGG	aggaggaaactgaggaagag...50...tccctcctctcg	gtaactga
C. Por	ggcccCAG	GGAaGAGGaGGAGG	aggaggaggaggaggag...77...tccctcctctcg	gtaactga
O. Cun	ggcccCAG	GGAaGAGGaGGAGG	aggaggagactgaggaagag...50...tccctcctctcg	gtaactga
C. Fam	ggcctCAG	GGAaGAGGaGGAGG	aggaggagactgaggaagag...50...tccctcctctcg	gtaactga
F. Cat	ggcccCAG	GGAaGAGGaGGAGG	aggaggagactgaggaagag...50...tccctcctctcg	gtaactga
B. Tau	ggcccCAG	GGAaGAGGaGGAGG	aggaggagactgaggaagag...50...tccctcctctcg	gtaactga
S. Sus	ggcccCAG	GGAaGAGGaGGAGG	agactgaggaagaggaagag...44...tccctcctctcg	gtaactga
O. Avi	ggcccCAG	GGAaGAGGaGGAGG	aggaggagactgaggaagag...50...tccctcctctcg	gtaactga
L. Afr	gaccCAG	GGAaGAGGaGGAGG	aggaggagactgaggaagag...50...tccctcctctcg	gtaactga
	* ** **	*****	** **** *	*****

id=603038 gene=ENSG00000124313 name=IQSEC2 segment=chrX.53296151.53296246_-1 type=AN VIEW

Figure 309: CS=9.1



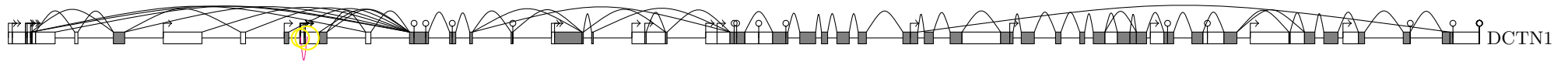
H.Sap	cagtgatg	gtgagtgggtac-...105...cgtgaagcaggggggcacta	GGACCC	AGAGGC	ta
R.Mac	cagtgatg	gtgagtgggtac-...105...ggtgaagcaggggggcacta	GGACCC	AGAGGC	ta
P.Tro	cagtgatg	gtgagtgggtac-...105...ggtgaagcaggggggcacta	GGACCC	AGAGGC	ta
P.Abe	cagtgatg	atgagtgggtac-...105...ggtgaagcaggggggcacta	GGACCC	AGAGGC	ta
C.Jac	cagtaatg	gtgagtgggtac-...105...ggtgaagcaggggggcacta	GGACCC	AGAGGC	ta
M.Mus	cagtgata	gtgag-gggtaca...80...tgtgaaggaggggagcacta	GGACCC	AGAGGC	ca
R.Nor	cagtgaca	gtgaa-gggcaca...78...ggtgaaggaggggagcacta	GGACCC	AGAGGC	ca
O.Cun	cagtgatg	ggagg-gggtgta...119...ggtgaagcaggggggcacta	GGACCC	AGAGGC	ca
C.Fam	cagtgatg	ctgag-gggtaca...129...ggtgaagcaggggggcacta	GGACCC	AGAGGC	ta
B.Tau	cagagatg	gtgaggggatgc-...120...ggtgcagcaggggggcacta	GGACCC	AGAGGC	ta
E.Cab	cagtgatg	gtgagggggtgc-...120...gctgaagaaggggggcacta	GGACCC	AGAGGC	ca
S.Sus	cagtgatg	gtgaaggggtgc-...119...ggtgaagaaggggggcacta	GGACCC	AGAGGC	ta
O.Avi	ggcagagg	gtgagggggtgc-...120...ggtgcagcaggggggcacta	GGACCC	AGAGGC	ta
L.Afr	cagggatg	gtgagggggtgc-...120...ggtgaagcaggggggcacta	GGACCC	AGAGGC	ta
	*	**	** ** *****	*****	*

id=173145 gene=ENSG00000204843 name=DCTN1 segment=chr2_74607483_74607625_-1 type=IN

H.Sap	gcaagcag	gattctgtGTCTCTGGGTTCAggaatcctcaggcagcaga...131...cctcctgcctag	gtttctac
R.Mac	gcaagcag	gattctgtGTCTCTGGGTTCAggaatcctcaggcagcaga...131...ccccctgcctag	gtttctac
P.Tro	gcaagcag	gattctgtGTCTCTGGGTTCAggaatcctcaggcagcaga...131...cctcctgcctag	gtttctac
P.Abe	gcaagcag	gattctgtGTCTCTGGGTTCAggaatcctcaggcagcaga...131...ccttctgcatag	gtttctac
C.Jac	gcaagcag	gattctgtGTCTCTGGGTTCAggaatcctcaggcagcaga...131...cctcctgcctag	gtttctac
M.Mus	gcaagcgg	ggctcagtGTCTCTGGGTTCAggaatccttgggcagtaga...122...cctcctgcctag	gtttctgc
R.Nor	gcgagcgg	ggctcagtGTCTCTGGGTTCAggaatccttgggcagtaga...119...cctcctgcctag	gtttctgc
O.Cun	gcaagcag	gattcagtTGTCTCTGGGTTCAggaatcctcgggcagcagg...131...cctcctgcctag	ctttctgc
C.Fam	gcaagcag	gattcgggtGTCTCTGGGTTCAggaatcctcgggcagcaga...131...cctcctgcctag	gtttctgc
B.Tau	gcaagcgg	ggttcgggtGTCTCTGGGTTCAggaatcctcagcagcaga...131...cctcctgcctag	gtttctgc
E.Cab	gcaagcag	gattcgggtGTCTCTGGGTTCAggaatcctcgggcagcaga...131...cctcctgcctag	gtttctgc
S.Sus	gcaagcag	gattcgggtGTCTCTGGGTTCAggaatcctcagcagcaga...130...cctcctggctag	gtttctgc
O.Avi	gcaagcag	gattcgggtGTCTCTGGGTTCAggaatcctcagcagcaga...131...cctcctgcctag	gtctctgc
L.Afr	gcaagcag	gattcgggtGTCTCTGGGTTCAggaatcctcggcagcaaa...131...cctcctgcctag	gtttctgc
	** ** *	* ** *****	** * **** * ** ** ** * ** *

id=173150 gene=ENSG00000204843 name=DCTN1 segment=chr2_74607228_74607410_-1 type=AN VIEW

Figure 311: CS=12.6



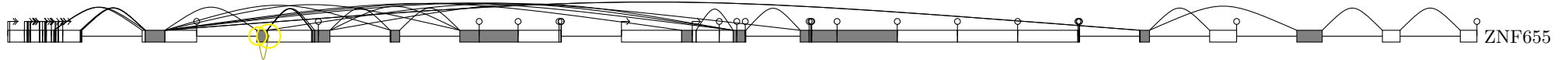
H. Sap	taGGACCC	AGAGGC	tagc	acggt
R. Mac	taGGACCC	AGAGGC	tagc	acggt
P. Tro	taGGACCC	AGAGGC	tagc	acggt
P. Abe	taGGACCC	AGAGGC	tagc	acggt
C. Jac	taGGACCC	AGAGGC	tagc	acggt
M. Mus	taGGACCC	AGAGGC	cagc	atgct
R. Nor	taGGACCC	AGAGGC	cagc	acgct
O. Cun	taGGACCC	AGAGGC	cagc	acaga
C. Fam	taGGACCC	AGAGGC	taac	acggt
B. Tau	taGGACCC	AGAGGC	tagc	tcggc
E. Cab	taGGACCC	AGAGGC	cagc	acggt
S. Sus	taGGACCC	AGAGGC	tagc	acggt
O. Avi	taGGACCC	AGAGGC	tagc	tcggc
L. Afr	taGGACCC	AGAGGC	tagc	acggt
*****	*****	*****	* *	

id=173146 gene=ENSG00000204843 name=DCTN1 segment=chr2_74607476_74607482_-1 type=AN

H. Sap	gcaagcag	gattctgtGTCTCTGGGTT	Caggaatcctcaggcagcaga...131...cctcctgcctag	gtttctac
R. Mac	gcaagcag	gattctgtGTCTCTGGGTT	Caggaatcctcaggcagcaga...131...ccccctgcctag	gtttctac
P. Tro	gcaagcag	gattctgtGTCTCTGGGTT	Caggaatcctcaggcagcaga...131...cctcctgcctag	gtttctac
P. Abe	gcaagcag	gattctgtGTCTCTGGGTT	Caggaatcctcaggcagcaga...131...ccttctgcatag	gtttctac
C. Jac	gcaagcag	gattctgtGTCTCTGGGTT	Caggaatcctcaggcagcaga...131...cctcctgcctag	gtttctac
M. Mus	gcaagcgg	ggctcagtGTCTCTGGGTT	Caggaatccttgggcagtaga...122...cctcctgcctag	gtttctgc
R. Nor	gcaagcgg	ggctcagtGTCTCTGGGTT	Caggaatccttgggcagtaga...119...cctcctgcctag	gtttctgc
O. Cun	gcaagcag	gattcagtTGTCTCTGGGTT	Caggaatcctcgggcagcagg...131...cctcctgcctag	ctttctgc
C. Fam	gcaagcag	gattcgggtGTCTCTGGGTT	Caggaatcatcgggcagcaga...131...cctcctgcctag	gtttctgc
B. Tau	gcaagcgg	ggttcgggtGTCTCTGGGTT	Caggaatcctccagcagcaga...131...cctcctgcctag	gtttctgc
E. Cab	gcaagcag	gattcgggtGTCTCTGGGTT	Caggaatcctcgggcagcaga...131...cctcctgcctag	gtttctgc
S. Sus	gcaagcag	gattcgggtGTCTCTGGGTT	Caggaatcctccagcagcaga...130...cctcctggcctag	gtttctgc
O. Avi	gcaagcag	gattcgggtGTCTCTGGGTT	Caggaatcctccagcagcaga...131...cctcctgcctag	gtctctgc
L. Afr	gcaagcag	gattcgggtGTCTCTGGGTT	Caggaatcctctggcagcaaa...131...cctcctgcctag	gtttctgc
** ** *	*	** *****	** * **** *	** *** ** * ** *

id=173150 gene=ENSG00000204843 name=DCTN1 segment=chr2_74607228_74607410_-1 type=AN VIEW

Figure 312: CS=4.2



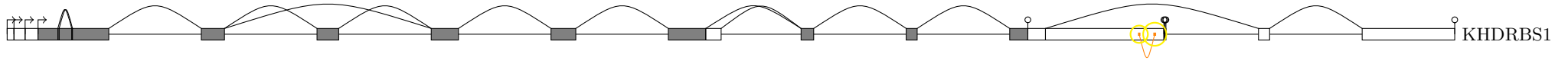
H.Sap	-cacttcat	cccagttctcac...890...--ctcttcactcctttctcctc	CCTCAG	CTcCACCT
R.Mac	-cacttcat	cccagttctcac...891...--cccttcactcctttctcctc	CCTCAG	CTcCACCT
P.Tro	-cacttcat	cccagttctcac...890...--ctcttcactcctttctcctc	CCTCAG	CTcCACCT
P.Abe	-cacttcat	cccagttctcac...887...--ctcttcactcctttctcctc	CCTCAG	CTcCACCT
C.Jac	-cacttcat	cccagttctcac...846...--ctcttcactcctttctcctc	CCTCAG	CTcCACCT
M.Mus	-agcttcac	tgcagacaccac...1441...cactcttggctcctttctcc	TCCCTCAG	CTcCACCT
R.Nor	gaatttcac	t-ctgtcaccac...1396...cactcttggctcctttctcc	TCCCTCAG	CTcCACCT
C.Por	-cacttcat	cccagtttaacac...1021...-attcttga-tcctttctcctc	CCTCAG	CTcCACCT
C.Fam	-gactttat	cccagtttcaca...886...--ctcttggctcctttctcctc	CCTCAG	CTcCACCT
F.Cat	-tactttat	cccggattcatt...881...--ctcttggctcctttctcctc	CCTCAG	CTcCACCT
B.Tau	-cacttcat	gccagttaccac...871...--ctcttggctcctttctcctc	CCTCAG	CTcCACCT
E.Cab	-cacttcac	cccacttaccac...930...--ctcttggctcctttctcctc	CCTCAG	CTcCACCT
S.Sus	-tgcttcat	cccagttggcac...1202...--ctcttggctcctttctcctc	CCTCAG	CTcCACCT
L.Afr	-cacttcat	cccagttataaa...917...-actcttggctccttttctcct	TCCTCAG	CTcCACCT
	** *	*	*** ***** **	*****

id=771688 gene=ENSG00000197343 name=ZNF655 segment=chr7_99158583_99159510.1 type=IN

H.Sap	ggtaccAG	GTGAGCTGAGG	aaccctctgcttttctcag--...327...ctcattcctcag	agcagcca
R.Mac	ggtaccAG	GTGAGCTGAGG	aaccctctgcttttctcag--...377...ctcattcctcag	agcagcca
P.Tro	ggtaccAG	GTGAGCTGAGG	aaccctctgcttttctcag--...327...ctcattcctcag	agcagcca
P.Abe	ggtaccAG	GTGAGCTGAGG	aaccctctgcttttctcag--...325...ctcattcctcag	agcagcca
C.Jac	ggtaccAG	GTGAGCTGAGG	aaccctctgcttttctcag--...348...ctcattcccaag	agcagcca
M.Mus	ggtaccAG	GTGAGCTGAGG	ccctctgcttttctcaggg...277...cccattcctgag	agcagcca
R.Nor	ggtaccAG	GTGAGCTGAGGA	ccctcagggtttctcaggg...276...cccattcctgag	agcagcca
C.Por	ggtaccAG	GTGAGCTGAGG	aaccctctgcttttctcag--...321...catttcccaag	agcagcca
C.Fam	ggtaccAG	GTGAGCTGAGG	aaccctctgcttttctcag--...336...ctcattcccag	agcagcca
F.Cat	ggtaccAG	GTGAGCTGAGG	aaccctctgcttttctcag--...333...ctcattcccag	agcagcca
B.Tau	ggtaccAG	GTGAGCTGAGG	aaccctctgcttttctcag--...326...cgccttcgcca	agcagcca
E.Cab	ggtaccAG	GTGAGCTGAGG	aacc-tctgctttcagggac...324...ctcattcccag	agcagcca
S.Sus	ggtaccAG	GTGAGCTGAGG	aaccctctgcttttctcag--...320...ctccttcccag	agcagcca
L.Afr	ggtaccAG	GTGAGCTGAGGA	ccctctgcttttctcaggg...309...tttattcccag	agcagcca
	*****	*****	** * * * * *	*** ** *****

id=771690 gene=ENSG00000197343 name=ZNF655 segment=chr7_99159597_99159966.1 type=AN VIEW

Figure 314: CS=19.32



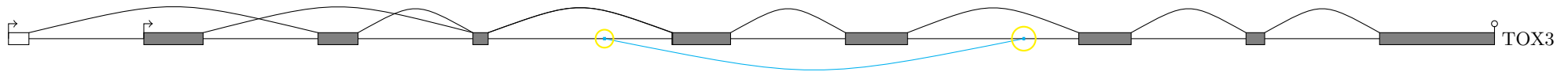
H. Sap	acagacaa	gtaattgtctaa...963...aaaaggaatcaaatccac	TTTGTACATAAGTTA	AAGTCCTA	ATTGG	attgtaccgtcctccatt...97...agtcctttttaa	atcaaagt
R. Mac	acagacaa	gtaattgtctaa...954...aaaaggaatcaaatccac	TTTGTACATAAGTTA	AAGTCCTA	ATTGG	attgtaccgtcctccatt...97...agtcctttttaa	atcaaagt
P. Tro	acagacaa	gtaattgtctaa...958...aaaaggaatcaaatccac	TTTGTACATAAGTTA	AAGTCCTA	ATTGG	attgtaccgtcctccatt...97...agtcctttttaa	atcaaagt
C. Jac	acagacaa	gtaattgtctaa...958...aaaaggaatcaaatccac	TTTGTACATAAGTTA	AAGTCCTA	ATTGG	attgtaccgtcctccatt...97...agtcctttttaa	atcaaagt
M. Mus	acagacaa	gtaattgtctaa...946...agaaaagaatcaaatccac	TTTGTACATAAGTTA	AAGTCCTA	ATTGG	attgtaccgtcctccatt...97...agtcctttttaa	atcaaagt
C. Por	acagacaa	gtaattgtctaa...940...aaaaggaatcaaatccac	TTTGTACATAAGTTA	AAGTCCTA	ATTGG	attgtaccgtcctccatt...97...agtcctttttaa	atcaaagt
O. Cun	acagacaa	gtaattgtctaa...950...-----tcaaaatccactttgtacat	AAGTCCTA	ATTGG	attgtaccgtcctccatt...97...agtcctttttaa	atcaaagt	
C. Fam	acagacaa	gtaattgtctaa...956...aaaaggaatcaaatccac	TTTGTACATAAGTTA	AAGTCCTA	ATTGG	attgtaccgtcctccatt...97...agtcctttttaa	atcaaagt
F. Cat	acagacaa	gtaattgtctaa...968...aaaaggaatcaaatccac	TTTGTACATAAGTTA	AAGTCCTA	ATTGG	attgtaccgtcctccatt...97...agtcctttttaa	atcaaagt
B. Tau	acagacaa	gtaattgtctaa...951...aaaaggaatcaaatccac	TTTGTACATAAGTTA	AAGTCCTA	ATTGG	attgtaccgtcctccatt...97...agtcctttttaa	atcaaagt
E. Cab	acagacaa	gtaattgtctaa...948...aaaaggaatcaaatccac	TTTGTACATAAGTTA	AAGTCCTA	ATTGG	attgtaccgtcctccatt...97...agtcctttttaa	atcaaagt
O. Avi	acagacaa	gtaattgtctaa...957...aaaaggaatcaaatccac	TTTGTACATAAGTTA	AAGTCCTA	ATTGG	attgtaccgtcctccatt...97...agtcctttttaa	atcaaagt
L. Afr	acagacaa	gtaattgtctaa...961...aaaaggaatcaaatccac	TTTGTACATAAGTTA	AAGTCCTA	ATTGG	attgtaccgtcctccatt...97...agtcctttttaa	atcaaagt
*****	*****	*****	*****	*****	*****	*****	*****

id=743155 gene=ENSG00000121774 name=KHDRBS1 segment=chr1_32508321_32509472.1 type=AN

H. Sap	acagacaa	gtaattgtctaa...1050...tgctacatgtgtaagtctgc	CTAAA	TAGG	taGCTT	AACTTATGTCAAA	atgtctgcagcagtttgtcaataaagtttagtcctttttaa	atcaaagt
R. Mac	acagacaa	gtaattgtctaa...1041...tgctacatgtgtaagtctgc	CTAAA	TAGG	taGCTT	AACTTATGTCAAA	atgtctgcagcagtttgtcaataaagtttagtcctttttaa	atcaaagt
P. Tro	acagacaa	gtaattgtctaa...1045...tgctacatgtgtaagtctgc	CTAAA	TAGG	taGCTT	AACTTATGTCAAA	atgtctgcagcagtttgtcaataaagtttagtcctttttaa	atcaaagt
C. Jac	acagacaa	gtaattgtctaa...1045...tgctacatgtgtaagtctgc	CTAAA	TAGG	taGCTT	AACTTATGTCAAA	atgtctgcagcagtttgtcaataaagtttagtcctttttaa	atcaaagt
M. Mus	acagacaa	gtaattgtctaa...1037...-----catgtgtaagtctgc	CTAAA	TAGG	taGCTT	AACTTATGTCAAA	atgtctgcagcagtttgtcaataaagtttagtcctttttaa	atcaaagt
C. Por	acagacaa	gtaattgtctaa...1032...-----catgtgtaagtctgc	CTAAA	TAGG	taGCTT	AACTTATGTCAAA	atgtctgcagcagtttgtcaataaagtttagtcctttttaa	atcaaagt
O. Cun	acagacaa	gtaattgtctaa...1028...tgctacatgtgtaagtctgc	CTAAA	TAGG	taGCTT	AACTTATGTCAAA	atgtctgcagcagtttgtcaataaagtttagtcctttttaa	atcaaagt
C. Fam	acagacaa	gtaattgtctaa...1043...tgctacatgtgtaagtctgc	CTAAA	TAGG	taGCTT	AACTTATGTCAAA	atgtctgcagcagtttgtcaataaagtttagtcctttttaa	atcaaagt
F. Cat	acagacaa	gtaattgtctaa...1055...tgctacatgtgtaagtctgc	CTAAA	TAGG	taGCTT	AACTTATGTCAAA	atgtctgcagcagtttgtcaataaagtttagtcctttttaa	atcaaagt
B. Tau	acagacaa	gtaattgtctaa...1038...tgctacatgtgtaagtctgc	CTAAA	TAGG	taGCTT	AACTTATGTCAAA	atgtctgcagcagtttgtcaataaagtttagtcctttttaa	atcaaagt
E. Cab	acagacaa	gtaattgtctaa...1035...tgctacatgtgtaagtctgc	CTAAA	TAGG	taGCTT	AACTTATGTCAAA	atgtctgcagcagtttgtcaataaagtttagtcctttttaa	atcaaagt
O. Avi	acagacaa	gtaattgtctaa...1044...tgctacatgtgtaagtctgc	CTAAA	TAGG	taGCTT	AACTTATGTCAAA	atgtctgcagcagtttgtcaataaagtttagtcctttttaa	atcaaagt
L. Afr	acagacaa	gtaattgtctaa...1048...tgctacatgtgtaagtctgc	CTAAA	TAGG	taGCTT	AACTTATGTCAAA	atgtctgcagcagtttgtcaataaagtttagtcctttttaa	atcaaagt
*****	*****	*****	*****	*****	*****	*****	*****	*****

id=743155 gene=ENSG00000121774 name=KHDRBS1 segment=chr1_32508321_32509472.1 type=AN VIEW

Figure 315:



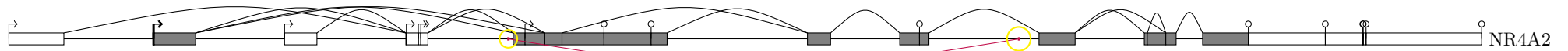
H. Sap	ccagtgag	gtaggtgactgt...3980...	--gtttcactaacatatcaata	AAGTAGCAATTTGT	-tatatgctccaactaacaac---	262...	gtttccttttag	cagacatt
R. Mac	ccagtgag	gtaggtgactat...3728...	--gtttcactaacatatcaata	AAGTAGCAATTTGT	-tatatgctccaactaacaac---	262...	gtttccttttag	cagacatt
P. Tro	ccagtgag	gtaggtgactgt...3955...	--gtttcactaacatatcaata	AAGTAGCAATTTGT	-tatatgctccaactaacaac---	262...	gtttccttttag	cagacatt
P. Abe	ccagtgag	gtaggtgactgt...4106...	ctgatactcattaaaacca---	TATGATAATGAGACT	taaatctttaatcagaatg---	162...	gtttccttttag	cagacatt
C. Jac	ccagtgag	gtaggtgactgt...4134...	--gatactcattaaaaccata---	TGATAATGAGACTTA	aatctttaatcagaatgatc...	159...	gtttccttttag	cagacgtt
M. Mus	ccagtgag	gtgggtgtctgt...3927...	--gatactcattaaaaccata---	TGATAATGAGACT	taaatctttaatcagaatga---	144...	gttctcttttag	cagacatt
R. Nor	ccagtgag	gtgggtgtctgt...3902...	--gatactcattaaaaccata---	TGATAATGAGACT	taaatctttaatcagaatga---	143...	gtttccttttag	cagacatt
C. Por	ccagtgag	gtaggtgtgtgt...3639...	--gatactcattaaaaccata---	TGATAATGAGACTTA	aatctttaatcagaatgatc...	152...	gtttccttttag	cagacgtt
O. Cun	cgggtgag	gtaggtgtcagt...3733...	ctgatactcattaaaacca---	TATGATAATGAGACT	taaatctttaatcagaatg---	160...	gtttccttttag	cacacatt
C. Fam	ccagtgag	gtaggtgtctat...4068...	ctgatactcattaaaacca---	TATGATAATGAGACT	taaatctttaatcagaatg---	158...	gtttccttttag	cagacatt
F. Cat	ccagtgag	gtaggtgtctgt...3843...	--gatactcattaaaaccata---	TGATAATGAGACTTA	aatctttaatcagaatgatc...	155...	gtttccttttag	cagacatt
B. Tau	ccagcgag	gtaggtgtctgt...3982...	--gatactcattaaaaccata---	TGATAATGAGACTTA	aatctttaatcagaatgatc...	155...	gtttccttttag	cagacatt
E. Cab	ccagtgag	gtgggtgtctgt...3792...	--gatactcattaaaaccata---	TGATAATGAGACTTA	aatctttaatcagaatgatc...	154...	gtttccttttag	cagacatt
S. Sus	ccagcgag	gtaggtgtctgt...3771...	--gatactcattaaaaccata---	TGATAATGAGACTTA	aatctttaatcagaatgatc...	145...	gtttccttttag	cagacatt
O. Avi	ccagcgag	gtaggtgtctgt...3973...	--gatactcattaaaaccata---	TGATAATGAGACTTA	aatctttaatcagaatgatc...	155...	gtttccttttag	cagacatt
L. Afr	ccagtgag	gtaggtgtctgt...3773...	--gatactcattaaaaccata---	TGATAATGAGACTTA	aatctttaatcagaatgatc...	161...	ctttccttttag	cagacatt
		* * * **	** ****	* * * * * * * *	* * * * * * * *	** ** * * *	** **** **	** * * **

id=820734 gene=ENSG0000103460 name=TOX3 segment=chr16_52498101.52502420_-1 type=IN

H. Sap	ccaacaga	gtaagttagaac...3770...	---tgttctgtttttcattactc----	ATAATTGCTATTT	-----cgagcatatgttgtgaacgt-----	208...	cctgctttgcag	gccattgg
R. Mac	ccaacaga	gtaagttagaac...3744...	---gtgtactgtttttcattatt-----	ATAATTGCTATTT	-----agagcatatgttgtgaatgt-----	208...	cctgctttgcag	gccattgg
P. Tro	ccaacaga	gtaagttagaac...3767...	---tgttctgtttttcattactc----	ATAATTGCTATTT	-----agagcatatgttgggaacgt-----	208...	cctgctttgcag	gccattgg
P. Abe	ccaacaga	gtaagttagaac...4535...	---tgc-atggtacagagtgttct-	GTTTctCATTaTCATA	attgatatttagagcatatg-----	215...	gattagaagcag	gccattgg
C. Jac	ccagcaga	gtaagttagaac...3914...	agatgtattg----aagatacttc	TGGGTCTCATTaATCA	-----atattcctaagtctaactctc...	158...	cctgctttgcag	gccattgg
M. Mus	caaacaga	gtaagttatcca...3137...	---atatattg----aagctacttct	GGTCTCATTaATCA	-----gtgttctaagtctaactctc...	157...	cctgctttgcag	gccattgg
R. Nor	caaacaga	gtaagttattga...3708...	---atatactg----aagctacttct	GGTCTCATTaATCA	-----gtgttctaagtctaactctc...	157...	cctgctttgcag	gccattgg
C. Por	ccaacaga	gtaagtttagagc...3753...	gaatgtattg----aagatacttc	TGGGTCTCATTaATCA	-----gtgttctaagtctaactctc...	157...	cctgctttgcag	gccattgg
O. Cun	ccaacaga	gtaagtttagagc...4261...	---tgc-ctggtacaaagtgttct-	GTTTctCATTaTCATA	attgctatttagagcatatg-----	218...	cctgctttgcag	gccattgg
C. Fam	ccaacaga	gtaagttgactg...4023...	---tgc-ctggtacagagtgttct-	GTTTctCATTaTCATA	attgctatttagagcatatg-----	222...	cctgctttgcag	gccattgg
F. Cat	ccaacaga	gtaagttgactg...3838...	gaatgtattg----aagatacttc	TGGGTCTCATTaATCA	-----atgttctaagtctaactctg...	160...	cctgctttgcag	gccattgg
B. Tau	ccaacaga	gtaagtttaactg...4074...	aaatgtattg----aagatacttc	TGGGTCTCATTaATCA	-----atgttctaagtctaactctc...	157...	cttgctttgcag	gccatcgg
E. Cab	ccaacaga	gtaagttgaactg...4043...	gaatgtattg----aagatacttc	TGGGTCTCATTaATCA	-----atgttctaagtctaactctc...	158...	cctgctttgcag	gccattgg
S. Sus	ccaacaga	gtaagttgaactg...4135...	gaatgtattg----aagatacttc	TGGGTCTCATTaATCA	-----atgttctaagtctaactctc...	157...	cctgctttgcag	gccattgg
O. Avi	ccaacaga	gtaagtttaactg...4062...	aaatgtattg----aagatacttc	TGGGTCTCATTaATCA	-----atgttctaagtctaactctc...	157...	cttgctttgcag	gccatcgg
L. Afr	ccaacaga	gtgagtttgaga...4744...	aaatgtattg----aagatacttc	TGGGTCTCATTaATCA	-----acgttctaagtctaactctc...	156...	tctgccttgcag	gccattgg
		* * * **	** **	* * * * *	* * * * *	* * * * *	* * * *	** * **

id=820739 gene=ENSG0000103460 name=TOX3 segment=chr16_52480134.52484188_-1 type=IN VIEW

Figure 316: CS=4.8



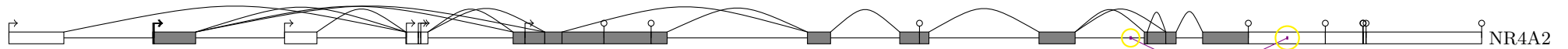
H.Sap	ggctgaag	gtagtgcaact...406...	gccccgggagaaagtgttcag	TTGACCAG	gcTGAG	tgtgttatcacctgtttcattccag	ccatgcct
R.Mac	ggctgaag	gtagtgcaact...433...	gccccgggagaaagtgttcag	TTGACCAG	gcTGAG	tgtg-tatcacctgtttcattccag	ccatgcct
P.Tro	ggctgaag	gtagtgcaact...408...	gccccgggagaaagtgttcag	TTGACCAG	gcTGAG	tgtgttatcacctgtttcattccag	ccatgcct
P.Abe	ggctgaag	gtagtgcaact...421...	gccccgggagaaagtgttcag	TTGACCAG	gcTGAG	tgtgttatcacctgtttcattccag	ccatgcct
C.Jac	ggctgaag	gtagtgcaact...443...	gccccgggagaaagtgttcag	TTGACCAG	gcTGAG	tgtg-tatcacctgtttcattccag	ccatgcct
M.Mus	tgctgaag	gtcagtgagcct...437...	gccccggaagaaagtgttcag	TTGACCAG	gcTGAG	tgtg-tatcacctgtttcattccag	ccatgcct
R.Nor	ggctgaag	gtagtgagcct...406...	ggccggaagaaagtgttcag	TTGACCAG	gcTGAG	tgtg-tatcacctgtttcattccag	ccatgcct
C.Por	ggctgaag	gtagtgcaact...413...	gcccctggagaaagtgttcag	TTGACCAG	gcTGAG	tgtg-tatcacctgtttcattccag	ccatgcct
O.Cun	tgctgaag	gtagtgcaact...408...	ccccgggagaaagtgttcag	TTGACCAG	gcTGAG	tgtg-tattacctgtttcattccag	ccatgcct
C.Fam	ggctgaag	gtagtgcaact...571...	gccccgggagaaagtgttcag	TTGACCAG	gcTGAG	tgtg-tatcacctgtttcattccag	ccatgcct
B.Tau	ggctgaag	gtagtgccact...410...	gccccgggagaaagtgttcag	TTGACCAG	gcTGAG	tgtg-tattacctgtttcattccag	ccatgcct
S.Sus	ggctgaag	gtagtgcaata...413...	gccccgggagaaagtgttcag	TTGACCAG	gcTGAG	tgtg-tattacctgtttcattccag	ccatgcct
L.Afr	ggctgaag	gtagtgcaact...421...	gccccgggagaaagtgttcag	TTGACCAG	gcTGAG	tgtg-tattacctgtttcattccag	ccatgcct
	*****	** ****	* * * * *	*****	*****	*** *****	*****

id=446053 gene=ENSG00000153234 name=NR4A2 segment=chr2_157186701_157187179_-1 type=IN

H.Sap	attccagg	gtaagaagctgg...771...	gccccggaacatctaatttc	CTTACTGGTCAG	agagaggtttaattgttata...83...	atgaaattccag	ttccaggc
R.Mac	attccagg	gtaagaagctgg...739...	gccccggaacatctaatttc	CTTACTGGTCAG	agagaggtttaattgttata...83...	atgaaattccag	ttccaggc
P.Tro	attccagg	gtaagaagctgg...771...	gccccggaacatctaatttc	CTTACTGGTCAG	agagaggtttaattgttata...83...	atgaaattccag	ttccaggc
P.Abe	attccagg	gtaagaagctgg...770...	gccccggaacatctaatttc	CTTACTGGTCAG	agagaggtttaattgttata...83...	atgaaattccag	ttccaggc
C.Jac	attccagg	gtaagaagctgg...769...	gccccggaacatctaatttc	CTTACTGGTCAG	agagaggtttaattgttata...83...	atgaaattccag	ttccaggc
M.Mus	attccagg	gtaagaagccgg...689...	gccccggaacatctaatttc	CTTACTGGTCAG	agagaggtttaattgttata...83...	atgaaattccag	ttccaggc
R.Nor	attccagg	gtaagaagctgg...679...	gccccggaacatctaatttc	CTTACTGGTCAG	agagaggtttaattgttata...83...	atgaaattccag	ttccaggc
C.Por	attccagg	gtaagaagctgg...721...	gccccggaacatctaatttc	CTTACTGGTCAG	agagaggtttaattgttata...83...	atgaaattccag	ttccaggc
O.Cun	attccagg	gtaagaagctgg...744...	gcccgggaacatctaatttc	CTTACTGGTCAG	agagaggtttaattgttata...83...	atgaaattccag	ttccaggc
C.Fam	attccagg	gtaagaagctgg...728...	gccccggaacatctaatttc	CTTACTGGTCAG	agagaggtttaattgttata...83...	atgaaattccag	ttccaggc
B.Tau	attccagg	gtaagaagctgg...732...	gccccggaacatctaatttc	CTTACTGGTCAG	agagaggtttaattgttata...83...	atgaaattccag	ttccaggc
S.Sus	attccagg	gtaagaagctgg...731...	gccccggaacatctaatttc	CTTACTGGTCAG	agagaggtttaattgttata...83...	atgaaattccag	ttccaggc
L.Afr	attccagg	gtaagaagctgg...748...	gccccggaacatctaatttc	CTTACTGGTCAG	agagaggtttaattgttata...83...	atgaaattccag	ttccaggc
	*****	*****	*	****	*****	*****	*****

id=446065 gene=ENSG00000153234 name=NR4A2 segment=chr2_157183433_157184362_-1 type=IN VIEW

Figure 317: CS=6.24



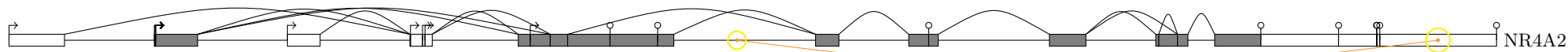
H. Sap	gcatacag	gtaataaggag...266...--tcagtaattaggtgactcct	AAATCCCTcaTTA	ttgctcttcaagtaattagt...	45...tattaattgcag	gtccaacc
R. Mac	gcatacag	gtaatgaggag...262...--tcagtaattaggtgcctcct	AAATCCCTcaTTA	ttgctcttcaagtaattagt...	45...tattaattgcag	gtccaacc
P. Abe	gcatacag	gtaatgaggag...265...--tcagtaattaggtgcctcct	AAATCCCTcaTTA	ttgctcttcaagtaattagt...	45...tattaattgcag	gtccaacc
C. Jac	gcatacag	gtaataaggag...260...--tcagtaattaggtgcctcct	AAATCCCTcaTTA	ttgctcttcaagtaattagt...	45...tattaattgcag	gtccaacc
M. Mus	gcatacag	gtaataaggag...202...--tcagtaattaggtgcctcct	AAATCCCTcaTTA	ttgctcttcaagtaattagt...	43...tattaattgcag	gtccaacc
R. Nor	gcatacag	gtaataaggag...201...--tcagtaattaggtgcctcct	AAATCCCTcaTTA	ttgctcttcaagtaattagt...	42...tattaattgcag	gtccaacc
C. Por	gcatacag	gtaataaggag...260...--tcagtaattaggtgcctcct	AAATCCCTcaTTA	ttgctcttcaagtaattagt...	43...tattaattgcag	gtccaacc
O. Cun	gcatacag	gtaacggcctag...239...--tcagtaattaggtgcctcct	AAATCCCTcaTTA	ttgctcttcaagtaattagt...	45...tattaattgcag	gtccaacc
C. Fam	gcgtacag	gtaataaggag...270...cttcgtaattaggtacctc	TAAATCCCTcaTTA	ttgctcttcaagtaattagt...	45...tattaattgcag	gtccaacc
B. Tau	gcctacag	gtaataaggag...254...--tggttaattaggtgcctcct	AAATCCCTcaTTA	ttgctcttcaagtaattagt...	60...tattaattgcag	gtccaacc
E. Cab	gcgtacag	gtaataaggag...266...--tcgtaattaggtgcctcct	AAATCCCTcaTTA	ttgctcttcaagtaattagt...	45...tattaattgcag	gtccaacc
S. Sus	gcatacag	gtaataaggag...273...--tcgtaattaggtgcctcct	AAATCCCTcaTTA	ttgctcttcaagtaattagt...	44...tattaattgcag	gtccaacc
L. Afr	gcttacag	gtaataaggag...277...--tcgtaattaggtgcctcct	AAATCCCTcaTTA	ttgctcttcaagtaattagt...	45...tattaattgcag	gtccaacc
	** *****	****	*	*****	*****	*****

id=446067 gene=ENSG00000153234 name=NR4A2 segment=chr2_157182841_157183229_-1 type=IN

H. Sap	ctttctaa	gacctcctcca...173...-cctaactgcaggcagaacc	TGAAAGGGcATTT	tggtccggggcatcctgga---	183...gacac-atcttaa	ggggaccc
R. Mac	ctttctaa	gacctcctcca...171...-cctaactgcaggcagaacc	TGAAAGGGcATTT	tggtccggggcatcctgga---	173...cacac-accttaa	ggggaccc
P. Abe	ctttctaa	gacctcctcca...173...-cctaactgcaggcagaacc	TGAAAGGGcATTT	tggtccggggcatcctgga---	195...aacat-atcttaa	ggggacac
C. Jac	ctttctaa	gacctcctcca...164...-cctaactgcaggcagaacc	TGAAAGGGcATTT	tggtccggggcatcctgga---	180...acacaatcttaa	ggggaccc
M. Mus	ctttctaa	gaccttctcca...176...-cctaactgcaggcagaacc	TGAAAGGGcATTT	tggtccggggcatcctgga---	178...cacac-accttaa	tgggaccc
R. Nor	ctttctaa	gaccttctcca...176...tcctaactgcaggcagaacc	TGAAAGGGcATTT	tggtccggggcatcctgga---	194...cacac-ctcttaa	tgggaccc
C. Por	ctttctaa	tatcttctcca...170...-cctaactgcaggcagaacc	TGAAAGGGcATTT	t-gctccggggcatcctggat--	184...catac-atcttaa	ggggaccg
O. Cun	ctttctaa	gatctcatcca...180...-cctaactgcaggcagaacc	TGAAAGGGcATTT	tggtccggggcatcctgga---	175...cacac-tccttat	ggggaccc
C. Fam	ctttctaa	gacctcctccc...180...-cctaactgcaggcagaacc	TGAAAGGGcATTTGG	-ctccggggcatcctggattt..	174...cacac-attgttt	ggggaccc
B. Tau	ctttctaa	gacctcctcca...179...-cctaactgcaggcagaacc	TGAAAGGGcATTT	tggtccggggcatcctgga---	171...cacac-gttgtaa	gaggaccc
E. Cab	ctttctaa	gacctcctcca...175...-cctaactgcaggcagaacc	TGAAAGGGcATTT	tggtccggggcatcctgga---	169...cacat-ctgtaa	ggggaccc
S. Sus	ctttctaa	gacctcctcca...175...-cctaactgcaggcagaacc	TGAAAGGGcATTT	tggtccggggcatcctgga---	171...ccac-attgtaa	ggggaccc
L. Afr	ctttctaa	gaccttctcca...172...-cctaactgcaggcagaacc	TGAAAGGGcATTT	tggtccggggcatcctgga---	150...cacat-acattaa	ggggaccc
	*****	* * *	*	*****	*	****

id=446073 gene=ENSG00000153234 name=NR4A2 segment=chr2_157181823_157182255_-1 type=E3 VIEW

Figure 318: CS=3.9



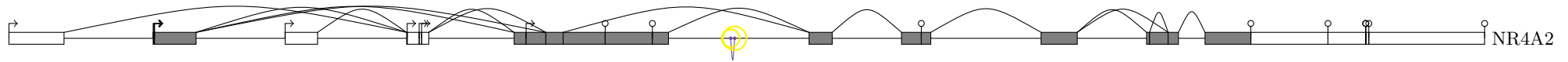
H. Sap	tctttaag	gtgagcaatggc...	303	.....	cttcctctgttcagaatgaaa	TTGGTTAG	ACAGAGAA	ccgtgtctgagctaaccaag...	405	...	ctccttttgag	cgcacagt
R. Mac	tctttaag	gtgagcagtggc...	269	.....	cttcctctgttcagaatgaaa	TTGGTTAG	ACAGAGAA	ccgtgtctgagctaaccaag...	405	...	ctccttttgag	cgcacagt
P. Tro	tctttaag	gtgagcaatggc...	303	.....	cttcctctgttcagaatgaaa	TTGGTTAG	ACAGAGAA	ccgtgtctgagctaaccaag...	405	...	ctccttttgag	cgcacagt
P. Abe	tctttaag	gtgagcaatagc...	303	.....	cttcctctgttcagaatgaaa	TTGGTTAG	ACAGAGAA	ccgtgtctgagctaaccaag...	405	...	ctccttttgag	cgcacagt
C. Jac	tctttaag	gtgagcaagggc...	302	.....	cttcctctgttcagaatgaaa	TTGGTTAG	ACAGAGAA	ccgtgtctgagctaaccaag...	412	...	ctccttttgag	cgcacagt
M. Mus	tctttaag	gtgagcaagaca...	474	...	ctcctgccccttctcctggc	-----	ATATAaAACACA	GCAAGgagcggtaaggttagctcaa...	254	...	ctcctctacag	cgcacggt	
R. Nor	tctttaag	gtgagcaagtca...	266	...	cgctgtcttcctgttcaga	TTGA	aaTTGGTTAG	ACAGAGAA	ccgtgtctgagctaaccaag...	401	...	ctcctctacag	cgcacggt
C. Por	tctttaag	gtgagcaagggc...	301	.....	cttcctctgttcagaatgaaa	TTGGTTAG	ACAGAGAA	ccgtgtctgagctaaccaag...	402	...	ctccttttgag	cgcacagt
O. Cun	tctttaag	gtgagatagggt...	326	.....	cttcctctgttcagaatgaaa	TTGGTTAG	ACAGAGAA	ccgtgtctgagctaaccaag...	414	...	ctccttttgag	cgcacagt
C. Fam	tttttaag	gtgagcaggagc...	292	.....	cttcctctgttcagaatgaaa	TTGGTTAG	ACAGAGAA	ccgtgtctgagctaaccaag...	414	...	ctccttttgag	cgcacggt
B. Tau	tctttaag	gtgagccaggtc...	294	.....	cttcctctgttcagaatgaaa	TTGGTTAG	ACAGAGAA	ccgtgtctgagctaaccaag...	409	...	ctccttttgag	cgcacggt
E. Cab	tctttaag	gtgagcaagaac...	297	.....	cttcctctgttcagaatgaaa	TTGGTTAG	ACAGAGAA	ccgtgtctgagctaaccaag...	414	...	ctccttttgag	cgcacggt
S. Sus	tctttaag	gtgagccagaac...	299	.....	cttcctctgttcagaatgaaa	TTGGTTAG	ACAGAGAA	ccgtgtctgagctaaccaag...	397	...	ctccttttgag	cgcacggt
L. Afr	tttttaag	gtgagcatggcg...	279	.....	cttcctctgttcagaatgaaa	TTGGTTAG	ACAGAGAA	ccgtgtctgagctaaccaag...	392	...	ctccttttgag	cgcacggt
	* **	*****			*	*	*	****	*	*	***	*	

id=446060 gene=ENSG00000153234 name=NR4A2 segment=chr2.157185046-157185834-1 type=IN

H. Sap	aaaataaa	tacataaaaag...	275	...	gaaagtttatcttgatta	TTT	----	TgTTGTCTAA	agCTAA	acaaaacttgcagcagcag	----	292	...	aatgaacagaa	ttttgtct
R. Mac	aaaataaa	tacataaaaag...	274	...	gaaagtttatcttgatta	TTT	----	TgTTGTCTAA	agCTAA	acaaaacttgcagcagcag	----	291	...	aatgaacagaa	ttttgtct
P. Tro	aaaataaa	tacataaaaag...	275	...	gaaagtttatcttgatta	TTT	----	TgTTGTCTAA	agCTAA	acaaaacttgcagcagcag	----	291	...	aatgaacagaa	ttttgtct
P. Abe	aaaataaa	tacataaaaag...	275	...	gaaagtttatcttgatta	TTT	----	TgTTGTCTAA	agCTAA	acaaaacttgcagcagcag	----	294	...	aatgaacagaa	ttttgtct
C. Jac	aaaataaa	tacataaaaag...	274	...	gaaagtttatcttgatta	TTT	----	TgTTGTCTAA	agCTAA	acaaaacttgcagcagcag	----	293	...	aatgaacagaa	ttttgtct
M. Mus	aaaataac	tacataaaaag...	218	...	acaccgcccaacattccttg	TTTGT	aaGTGT	TgTATGT	-----	accgttgatggtgataaaaag	----	365	...	aatgaacagaa	ctctgtct
R. Nor	aaaataac	tcataaaaag...	274	...	gaaagtttatcttgatta	TTT	----	TgTTGTCTAA	agCTAA	acaaaacttgcagcagcag	----	300	...	aatgaacagaa	ttttgtct
C. Por	aaaataac	tacataaaaag...	274	...	gaaagtttatcttgatta	TTT	----	TgTTGTCTAA	agCTAA	acaaaacttgcagcagcag	----	301	...	aatgaacagaa	ttttgtct
O. Cun	aaaataac	tacataaaaag...	274	...	gaaagtttatcttgatta	TTT	----	TgTTGTCTAA	agCTAA	acaaaacttgcagcagcag	----	302	...	aatgaacagaa	ttttgtct
C. Fam	aaaataac	tacataaaaag...	274	...	gaaagtttatcttgatta	TTT	----	TgTTGTCTAA	agCTAA	acaaaacttgcagcagcag	----	305	...	aatgaacagaa	ttttgtct
B. Tau	gaaataac	tactcaaaaag...	274	...	gaaagtttatcttgatta	TTT	----	TgTTGTCTAA	agCTAA	acaaaacttgcagcagcag	----	298	...	aatgaacagaa	ttttgtct
E. Cab	gaaataac	tacataaaaag...	274	...	gaaagtttatcttgatta	TTT	----	TgTTGTCTAA	agCTAA	acagaacttgcagcagcag	----	305	...	aaacgaacagaa	ttttgtct
S. Sus	gaaataac	tacataaaaag...	273	...	gaaagtttatcttgatta	TTT	----	TgTTGTCTAA	agCTAA	annnnnnnnnnnnnnnnnn	----	245	...	aatgaacagaa	ttttgtct
L. Afr	taataaaa	tacataaaaag...	274	...	gaaagtttatcttgatta	TTT	----	TgTTGTCTAA	agCTAA	acaaaacttgcagcagcag	----	308	...	aatgaacagaa	ttttgtct
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id=446077 gene=ENSG00000153234 name=NR4A2 segment=chr2.157180944-157181593-1 type=E3 VIEW

Figure 319:



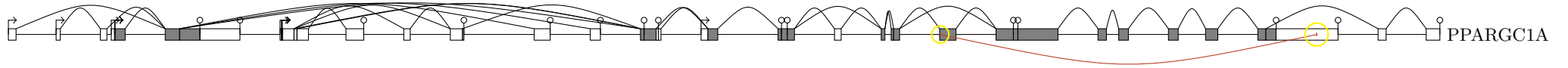
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R.Mac	tctttaag	gtgagcagtggc...269...cttcctgttcagaatgaaaTTGGTTAGgaCAGAgAACCGTGTCTGAGCTAAC...408...ctccttttgag	cgcacagt
P.Tro	tctttaag	gtgagcaatggc...303...cttcctgttcagaatgaaaTTGGTTAGgaCAGAgAACCGTGTCTGAGCTAAC...408...ctccttttgag	cgcacagt
P.Abe	tctttaag	gtgagcaatagc...303...cttcctgttcagaatgaaaTTGGTTAGgaCAGAgAACCGTGTCTGAGCTAAC...408...ctccttttgag	cgcacagt
C.Jac	tctttaag	gtgagcaagggc...302...cttcctgttcagaatgaaaTTGGTTAGgaCAGAgAACCGTGTCTGAGCTAAC...415...ctccttttgag	cgcacagt
R.Nor	tctttaag	gtgagcaagtca...272...cttcctgttcagattgaaaTTGGTTAGgaCAGAgAACCGTGTCTGAGCTAAC...404...ctccctctacag	cgcacggt
C.Por	tctttaag	gtgagcaagggc...301...cttcctgttcagattgaaaTTGGTTAGgaCAGAgAACCGTGTCTGAGCTAAC...405...ctccttttgag	cgtacagt
O.Cun	tctttaag	gtgagatagggt...326...cttcctgttcagattgaaaTTGGTTAGgaCAGAgAACCGTGTCTGAGCTAAC...417...ctccttttgag	cgcacagt
C.Fam	tctttaag	gtgagcaggac...292...cttcctgttcagattgaaaTTGGTTAGgaCAGAgAACCGTGTCTGAGCTAAC...417...ctccttttgag	cgcacggt
B.Tau	tctttaag	gtgagccaggtc...294...cttcctgttcagattgaaaTTGGTTAGgaCAGAgAACCGTGTCTGAGCTAAC...412...ctccttttgag	cgcacggt
E.Cab	tctttaag	gtgagcaagaac...297...cttcctgttcagattgaaaTTGGTTAGgaCAGAgAACCGTGTCTGAGCTAAC...417...ctccttttgag	cgcacggt
S.Sus	tctttaag	gtgagccagaac...299...cttcctgttcagattgaaaTTGGTTAGgaCAGAgAACCGTGTCTGAGCTAAC...400...ctcccttttgag	cgcacggt
O.Avi	tctttaag	gtgagccaggtc...294...cttcctgttcagattgaaaTTGGTTAGgaCAGAgAACCGTGTCTGAGCTAAC...411...ctccttttgag	cgcacggt
L.Afr	tctttaag	gtgagcatggcg...279...cttcctgttcagattgaaaTTGGTTAGgaCAGAgAACCGTGTCTGAGCTAAC...395...ctccttttgag	cgcacggt
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id=446060 gene=ENSG00000153234 name=NR4A2 segment=chr2.157185046_157185834_-1 type=IN

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R.Mac	tctttaag	gtgagcagtggc...291...ggttaggacagagaaccgtgTCTGagCTAACCAAGtggaaacagaattccctatg...386...ctccttttgag	cgcacagt
P.Tro	tctttaag	gtgagcaatggc...325...ggttaggacagagaaccgtgTCTGagCTAACCAAGtggaaacagaattccctatg...386...ctccttttgag	cgcacagt
P.Abe	tctttaag	gtgagcaatagc...325...ggttaggacagagaaccgtgTCTGagCTAACCAAGtggaaacagaattccctatg...386...ctccttttgag	cgcacagt
C.Jac	tctttaag	gtgagcaagggc...324...ggttaggacagagaaccgtgTCTGagCTAACCAAGtggaaacagaattccctatg...393...ctccttttgag	cgcacagt
R.Nor	tctttaag	gtgagcaagtca...294...ggttaggacagagaaccgtgTCTGagCTAACCAAGtggaaacagaattccctatg...382...ctccctctacag	cgcacggt
C.Por	tctttaag	gtgagcaagggc...323...ggttaggacagagaaccgtgTCTGagCTAACCAAGtggaaacagaattccctatg...383...ctccttttgag	cgtacagt
O.Cun	tctttaag	gtgagatagggt...348...ggttaggacagagaaccgtgTCTGagCTAACCAAGtggaaacagaattccctatg...395...ctccttttgag	cgcacagt
C.Fam	tctttaag	gtgagcaggac...314...ggttaggacagagaaccgtgTCTGagCTAACCAAGtggaaacagaattccctatg...395...ctccttttgag	cgcacggt
B.Tau	tctttaag	gtgagccaggtc...316...ggttaggacagagaaccgtgTCTGagCTAACCAAGtggaaacagaattccctatg...390...ctccttttgag	cgcacggt
E.Cab	tctttaag	gtgagcaagaac...319...ggttaggacagagaaccgtgTCTGagCTAACCAAGtggaaacagaattccctatg...395...ctccttttgag	cgcacggt
S.Sus	tctttaag	gtgagccagaac...321...ggttaggacagagaaccgtgTCTGagCTAACCAAGtggaaacagaattccctatg...378...ctcccttttgag	cgcacggt
O.Avi	tctttaag	gtgagccaggtc...316...ggttaggacagagaaccgtgTCTGagCTAACCAAGtggaaacagaattccctatg...389...ctccttttgag	cgcacggt
L.Afr	tctttaag	gtgagcatggcg...301...ggttaggacagagaaccgtgTCTGagCTAACCAAGtggaaacagaattccctatg...373...ctccttttgag	cgcacggt
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id=446060 gene=ENSG00000153234 name=NR4A2 segment=chr2.157185046_157185834_-1 type=IN VIEW

Figure 320:



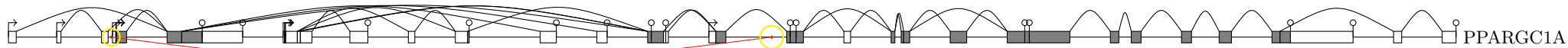
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R.Mac	aactgcag	gtaagccttata...3612...--gataaaaaactcttctctt--	TTACAG	GTGTAAAa
P.Tro	aactgcag	gtaagccttata...3606...--gataaaaaactcttctctt--	TTACAG	GTGTAAAa
P.Abe	aactgcag	gtaagccttata...3596...--taaaaaaaactcttctctt--	TTACAG	GTGTAAAa
C.Jac	aactgcag	gtaagccttata...3618...--ataaaaaaaactcttctctt--	TTACAG	GTGTAAAa
M.Mus	aactgcag	gtaagccttata...4951...--ataaaaaaaactcttctctt--	TTACAG	GTGTAAAa
R.Nor	aactgcag	gtaagccttata...4951...--ataaaaaaaactcttctctt--	TTACAG	GTGTAAAa
C.Por	aactgcag	gtaagccttata...4945...ctgataaaaaaaactcttctctt--	TGTCTTACAG	GTGTAAAa
O.Cun	aactgcag	gtaagccttata...4951...--ataaaaaaaactcttctctt--	TTACAG	GTGTAAAa
C.Fam	aactgcag	gtaagccttata...4951...--ataaaaaaaactcttctctt--	TTACAG	GTGTAAAa
B.Tau	aactgcag	gtaagccttata...4951...--aaaaaaaagcgtctctt--	TTACAG	GTGTAAAa
E.Cab	aactgcag	gtaagccttata...4951...--taaaaaaacgctctctt--	TTACAG	GTGTAAAa
L.Afr	aactgcag	gtaagccttata...4951...--aaaaaaaactcttctctt--	TTACAG	GTGTAAAa
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id=404389 gene=ENSG00000109819 name=PPARGC1A segment=chr4_23822262_23825902_-1 type=IN

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R.Mac	acaaaaaa	caaaaca-aaca...3341...tataatgtgatgattctaaa	TTTGTACCT	atGTGA	cagacatcttcaataatgtg-----	...234...gttcaaatcta	ctcctgct
P.Tro	tacaaaaa	caaaaca-aaca...3362...tataatgtgatgattctaaa	TTTGTACCT	atGTGA	cagacatcttcaataatgtg-----	...235...gttcaaatcta	cttctgct
P.Abe	tacaaaaa	caaaaca-aaca...3336...tataatgtgatgattctaaa	TTTGTACCT	atGTGA	cagacatcttcaataatgtg-----	...235...gttcaaatcta	cttctgct
C.Jac	tacaaaaa	caaaaca-aaca...3350...tataatgtgatgattctaaa	TTTGTACCT	atGTGA	cagacatcttcaataatgtg-----	...235...gttcaaatcta	cttctgct
M.Mus	tacaaaaa	taaaaca-aaca...3492...tataatgtgatgattctaaa	TTTGTACCT	atGTGA	cagacatcttcaataatgtg-----	...236...gttcaaatcta	cttctgct
R.Nor	tacaaaaa	taaaaca-aaca...4036...tataatgtgatgattctaaa	TTTGTACCT	atGTGA	cagacatcttcaataatgtg-----	...235...gttcaaatcta	cttctgct
C.Por	tacaaaaa	caaaacaac-...3432...tataatgtgatgattctaaa	TTTGTACCT	atGTGA	cagacatcttcaataatgtg-----	...228...gttcaaatcta	cctctgct
O.Cun	tacaaaaa	c-aaacaaca...3351...tataatgtgatgattctaaa	TTTGTACCT	atGTGA	cagacatcttcaataatgtg-----	...235...gttcaaatcta	cttctgct
C.Fam	tataaaaa	caaaaca-aaca...3454...tataatgtgatgattctaaa	TTTGTACCT	atGTGA	cagacatcttcaataatgtg-----	...265...gttcaaatcta	cttctgct
B.Tau	tacaaaaa	caaaacaac-...3365...tataatgtgatgattctaaa	TTTGTACCT	atGTGA	cagacatcttcaataatgtg-----	...235...gttcaaatcta	cttctgct
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id=404406 gene=ENSG00000109819 name=PPARGC1A segment=chr4_23793644_23797320_-1 type=AN VIEW

Figure 322: CS=3.9



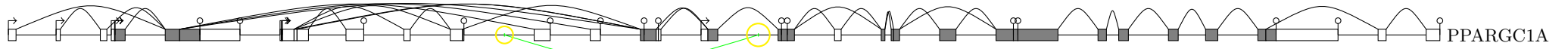
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R. Mac	gaggctgg	gtgagtgacagcccagcctactt	TTTAA	TAGCTTTGT	catgtgactggggactg	tagtaaga
P. Tro	gaggctgg	gtgagtgacagcccagcctactt	TTTAA	TAGCTTTGT	catgtgactggggactg	tagtaaga
P. Abe	gaggctgg	gtgagtgacagcccagcctactt	TTTAA	TAGCTTTGT	catgtgactggggactg	tagtaaga
C. Jac	gaggctgg	gtgagtgacagcccagcctactt	TTTAA	TAGCTTTGT	catgtgactggggactg	tagtaaga
M. Mus	gaggctgg	gtgagtgacagcccagcctactt	TTTAA	TAGCTTTGTCAT	gtgactggggactg	tagtaaga
R. Nor	gaggctgg	gtgagtgacagcccagcctactt	TTTAA	TAGCTTTGTCAT	gtgactggggactg	tagtaaga
C. Por	gaggctgg	gtgagtgacggcccagcctactt	TTTAA	TAGCTTTGTCAT	gtgactggagactg	tagtaaga
O. Cun	gaggctga	gtgagtgacagcccagcctactt	TTTAA	TAGCTTTGTCAT	gtgactggggactg	tagtaaga
C. Fam	gaggctgg	gtgagtgacagcccagcctactt	TTTAA	TAGCTTTGTCAT	gtgactgggaactg	tagtaaga
F. Cat	gaggctgg	gtgagtgacagcccagcctactt	TTTAA	TAGCTTTGTCAT	gtgactggggactg	tagtaaga
B. Tau	gaggctgg	gtgagtgacagcccagcctactt	TTTAA	TAGCTTTGTCAT	gtgactggggactg	tagtaaga
E. Cab	gaggctgg	gtgagtgacagcccagcctactt	TTTAA	TAGCTTTGTCAT	gtgactggggactg	tagtaaga
L. Afr	gaggctgg	atgagtgacagcccagcctactt	TTTAA	TAGCTTTGTCAT	gtgactggggactg	tagtaaga
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R. Mac	ttgttaag	gtacaaatgtaa...	626...	-----	tgaaatgtaggagaaataaa	ATAAaa	AGCTG	ca	TAAA	tgatcatttaggaattttaaa...	153...	ctgtttttaag	actgagaa	
P. Tro	ttgttaag	gtacaaatgtaa...	624...	-----	tgaaatgtaggagaaataaa	ATAAaa	AGCTG	ca	TAAA	tgatcatttaggaattttaaa...	153...	ctgtttttaag	actgagaa	
P. Abe	ttgttaag	gtacaaatgtaa...	623...	-----	tgaaatgtaggagaaataaa	ATAAaa	AGCTG	ca	TAAA	tgatcatttaggaattttaaa...	153...	ctgtttttaag	actgagaa	
C. Jac	ttgttaag	gtacaaatgtaa...	627...	-----	tgaaatgtaggagaaataaa	ATAAaa	AGCTG	ca	TAAA	tgatcatttaggaattttaaa...	153...	ctgtttttaag	actgagaa	
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R. Nor	ttgttaag	gtacagccagca...	620...	aacattgaaatgtaggagaa	ATGAa	ATAAaa	aaGCTG	ca	TAAA	tgatcatttaggaattttaaa...	165...	ttgtttttaag	accgagaa
C. Por	ttgttaag	gtacagccagca...	622...	aacattgaaatgtaggagaa	ATGAa	ATAAaa	aaGCTG	ca	TAAA	tgatcatttaggaattttaaa...	152...	ctgtttttaag	accgagaa
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C. Fam	ttgttaag	gtac-aacgtaa...	619...	aacattgaaatgtaggagaa	ATGAa	ATAAaa	aaGCTG	ca	TAAA	tgatcatttaggaattttaaa...	152...	ctgtttttaag	accgagaa
F. Cat	tcgttaag	gtac-gatgtgaa...	619...	....	aacattgaaatgtaggagaa	ATGAa	ATAAaa	aaGCTG	cc	TAAA	tgatcatttaggaattttaaa...	154...	ctcgtttttaag	accgagaa
B. Tau	ttgttaag	gtacaaatgtaa...	622...	....	aacattgaaatgtaggagaa	ATGAa	ATAAaa	aaGCTG	ca	TAAA	tgatcatttaggaattttaaa...	152...	ctgtttttaag	accgagaa
E. Cab	ttgttaag	gtacaaacgtaa...	629...	....	aacattgaaatgtaggagaa	ATGAa	ATAAaa	aaGCTG	ca	TAAA	tgatcatttaggaattttaaa...	152...	ctgtttttaag	accgagaa
L. Afr	ttgttaag	gtacaaac-tatt...	618...	aacattgaaatgtaggagaa	ATGAa	ATAAaa	aaGCTG	ca	TAAA	tgatcatttaggaattttaaa...	152...	ctgtttttaag	accgagac
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id=404378 gene=ENSG00000109819 name=PPARGC1A segment=chr4_23830228_23831085_-1 type=IN VIEW

Figure 323:



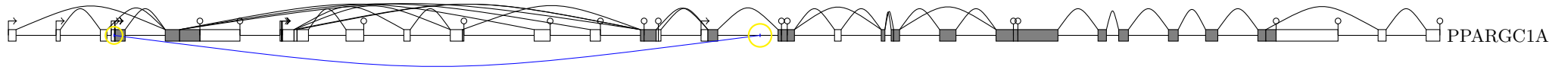
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C.Jac	ccctataa	ttatgtgcctat...950...	ggtatacttcatttttattc	TTGACAcAGAcCCTA	aatcagagAACagtaacatt...306...	ttaatgttctag	gtgatata
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R.Nor	ccctataa	ttatgtgcctat...922...	ggtatacttcatttttattc	TTGACAcAGAcCCTA	aatcagagAACagtaacatt...339...	ttaatgttctag	gtgatata
C.Por	ccctataa	ttatgtgcctat...952...	ggtatacttcatttttattc	TTGACAcAGAcCCTA	aatcagagAACagtaacatt...339...	ttaatgttctag	gtgatata
O.Cun	gcttataa	ttaggtgccaat...941...	ggtatacttcatttttattc	TTGACAcAGAcCCTA	aatcagagAACagtaacatt...339...	tcaacttctag	gtgatata
C.Fam	ccctataa	ttatgggcctat...1111...	ggtatacttcatttttattc	TTGACAcAGAcCCTA	aatcagagAACagtaacatt...337...	ttaacttctag	gtgatata
B.Tau	cccgataa	ttatgtgcctag...978...	ggtatacttcatttttattc	TTGACAcAGAcCCTA	aatcagagAACagtaacatt...337...	ttaaggttctag	gtgatata
E.Cab	ccctataa	ttgcgtgcctac...972...	ggtatacttcatttttattc	TTGACAcAGAcCCTA	aatcagagAACagtaacatt...337...	ttaatgttctag	gtgatata
L.Afr	ccctataa	ttgtgcacctat...1381...	ggtatacttcatttttattc	TTGACAcAGAcCCTA	aatcagagAACagtaacatt...337...	ttaaggttctag	gtgatata
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P.Tro	ttgttaag	gtacaaatgtaa...566...	tattcacaataaaggcgctg	TAGGGTCTTGTTAG	ttacatggtgctgagtagga...214...	cttgttttaag	actgagaa
P.Abe	ttgttaag	gtacaaatgtaa...565...	tattcacaataaaggcgctg	TAGGGTCTTGTTAG	ttacatggtgctgagtagga...214...	cttgttttaag	actgagaa
C.Jac	ttgttaag	gtacaaatgtaa...569...	tattcacagtaaaggcgctg	TAGGGTCTTGTTAG	ttacatggtgctgagtagga...214...	cttgttttaag	actgagaa
M.Mus	ttgttaag	gtgcgcatgcaa...571...	tcctcacagtaaaggcgctg	TAGGGTCTTGTTAG	ttacatggtgctgagtagga...215...	cttgttttaag	accgagaa
R.Nor	ttgttaag	gtgcgcatgcaa...567...	tcctcacagtaaaggcgctg	TAGGGTCTTGTTAG	ttacatggtgctgagtagga...226...	cttgttttaag	accgagaa
C.Por	ttgttaag	gtacagccagca...569...	tatacagagtaaaggcgctg	TAGGGTCTTGTTAG	ttacatggtgctgagtagga...213...	cttgttttaag	accgagaa
O.Cun	ttgttaag	gtacaaacgtaa...608...	tattcacagtaaaggcgctg	TAGGGTCTTGTTAG	ttacatggtgctgagtagga...212...	cttgttttaag	actgagaa
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id=404378 gene=ENSG00000109819 name=PPARGC1A segment=chr4_23830228_23831085_-1 type=IN VIEW

Figure 324:



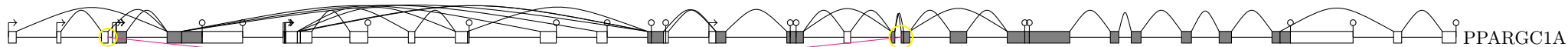
H.Sap	ggggactg	tagtaagacaggtgcc	TTCAGTTCACTC	t	AGTAA	ggggctg	gttgcctg
P.Tro	ggggactg	tagtaagacaggtgcc	TTCAGTTCACTC	t	AGTAA	ggggctg	gttgcctg
C.Jac	ggggactg	tagtaagacaggtgcc	TTCAGTTCACTC	t	AGTAA	ggggctg	gttgcctg
M.Mus	ggggactg	tagtaagacaggtgccttca	GTTCACTC	t	AGTAA	ggggctg	gttgcctg
R.Nor	ggggactg	tagtaagacaggtgccttca	GTTCACTC	t	AGTAA	ggggctg	gttgcctg
C.Por	gggactg	tagtaagacaggtgcc	TTTAGTTCACTC	t	AGTAA	--gctg	gttgcctg
O.Cun	ggggactg	tagtaagacaggtgcc	TTCAGTTCACTC	t	AGTAA	ggggctg	gttgcctg
C.Fam	gggaactg	tagtaagacaggtgcc	TTCAGTTCACTC	t	AGTAA	ggggctg	gttgcctg
F.Cat	ggggactg	tagtaagacaggtgcc	TTCAGTTCACTC	t	AGTAA	ggggctg	gttgcctg
B.Tau	ggggactg	tagtaagacaggtgcc	TTCAGTTCACTC	t	AGTAA	ggggctg	gttgcctg
E.Cab	ggggactg	tagtaagacaggtgcc	TTCAGTTCACTC	t	AGTAA	ggggctg	gttgcctg
L.Afr	ggggactg	tagtaagacaggtgcc	TTCAGTTCACTC	t	AGTAA	ggggctg	gtgcctg
	**	****	*****	*****	****	**	****

id=404344 gene=ENSG00000109819 name=PPARGC1A segment=chr4_23891659_23891700_-1 type=AN

H.Sap	ttgttaag	gtacaaatgtaa...	587...	agggtcctg	ttagttacatg	TTGCTGAGT	agGAAC	TGAA	atgtaggagaaataaataa...	186...	ctgtttttaag	actgagaa
P.Tro	ttgttaag	gtacaaatgtaa...	587...	agggtcctg	ttagttacatg	TTGCTGAGT	agGAAC	TGAA	atgtaggagaaataaataa...	186...	ctgtttttaag	actgagaa
C.Jac	ttgttaag	gtacaaatgtaa...	590...	agggtcctg	ttagttacatg	TTGCTGAGT	agGAAC	TGAA	atgtaggagaaataaataa...	186...	ctgtttttaag	actgagaa
M.Mus	ttgttaag	gtgcgcatgcaa...	592...	agggtcctg	ttagttacatg	TTGCTGAGT	agGAAC	atcgggatgtaggagaaatg-----	193...	ctgtttttaag	accgagaa	
R.Nor	ttgttaag	gtgcgcatgcaa...	588...	agggtcctg	ttagttacatg	TTGCTGAGT	agGAAC	atcgggatgtaggggaaatg-----	204...	ttgtttttaag	accgagaa	
C.Por	ttgttaag	gtacagccagca...	590...	agggtcctg	ttagttacatg	TTGCTGAGT	agGAAC	TGAA	atgtaggagaaatgaataa...	185...	ctgtttttaag	accgagaa
O.Cun	ttgttaag	gtacaaacgtaa...	629...	agggtcctg	ttagttacatg	TTGCTGAGT	agGAAC	TGAA	atgtaggacaaatgaataa...	184...	cctgtttttaag	actgagaa
C.Fam	ttgttaag	gtac-aacgtaa...	587...	agggtcctg	ttagttacatg	TTGCTGAGT	agGAAC	TGAA	atgtaggagaaatgaataa...	185...	ctgtttttaag	accgagaa
F.Cat	tcgttaag	gtac-gatgtgaa...	587...	agggtcctg	ttagttacatg	TTGCTGAGT	agGAAC	TGAA	atgtaggagaaatgaataa...	187...	ctgtttttaag	accgagaa
B.Tau	ttgttaag	gtacaattgtaa...	590...	agggtcctg	ttagttacatg	TTGCTGAGT	agGAAC	TGAA	atgtaggagaaatgaataa...	185...	ctgtttttaag	accgagaa
E.Cab	ttgttaag	gtacaaacgtaa...	597...	agggtcctg	ttagttacatg	TTGCTGAGT	agGAAC	TGAA	atgtaggagaaatgaataa...	185...	ctgtttttaag	accgagaa
L.Afr	ttgttaag	gtacaaac-tatt...	586...	agggtcctg	ttagttacatg	TTGCTGAGT	agGAAC	TGAA	atgtaggagaaatgaataa...	185...	ctgtttttaag	accgagac
	**	*****	**	*	*****	*	*****	****	*****	**	****	

id=404378 gene=ENSG00000109819 name=PPARGC1A segment=chr4_23830228_23831085_-1 type=IN VIEW

Figure 325:



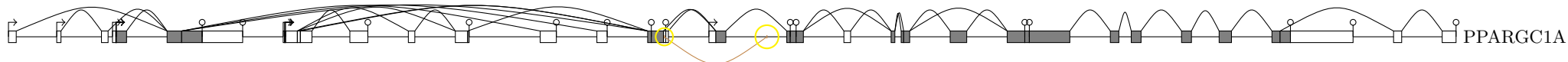
H.Sap	ttttaag	cgttacttcact...31...	gagttagagcagcaagc--tgc	ACAGGg	GAAGGGAGGCTGg	gtgagtga
R.Mac	ttttaag	cgttacttcact...31...	gagttagagcagcaagc--tgc	ACAAGg	GAAGGGAGGCTGg	gtgagtga
P.Tro	ttttaag	cgttacttcact...31...	gagttagagcagcaagc--tgc	ACAGGg	GAAGGGAGGCTGg	gtgagtga
P.Abe	ttttaag	cgttacttcact...31...	gagttagagcagcaagc--tgc	ACAGGg	GAAGGGAGGCTGg	gtgagtga
C.Jac	ttttaag	cgttacttcact...31...	gagttagagcagcaagc--tgc	ACAGGg	GAAGGGAGGCTGg	gtgagtga
M.Mus	tctctaag	cgttacttcact...32...	-agtttgagcagcaagc--ttgc	ACAGGg	GAAGGGAGGCTGg	gtgagtga
R.Nor	tctctaag	cgttacttcact...31...	gagttgagcagcaagc--tgc	ACAGGg	GAAGGGAGGCTGg	gtgagtga
C.Por	ttttttg	cgttacttcact...30...	gagttgagcagcaagc--tgc	ACAGGg	GAAGGGAGGCTGg	gtgagtga
O.Cun	ttttaag	cgttacttcact...34...	---ttgagcagcaagcaataca----		GAAGGGAGGCTGa	gtgagtga
C.Fam	ttttaag	cgttacttcact...31...	gagttgagcagcaagc--tgc	ACAGGg	GAAGGGAGGCTGg	gtgagtga
F.Cat	ttttaag	cgttacttcact...31...	gagttgagcagcaagc--tgc	ACAGGg	GAAGGGAGGCTGg	gtgagtga
B.Tau	ttttaag	cgttacttcact...31...	aaagttgagcagcagc--agc	ACAGGg	GAAGGGAGGCTGg	gtgagtga
E.Cab	ttcctaag	cgttacttcact...31...	gagttgagcagcaagc--tgc	ACAGGg	GAAGGGAGGCTGg	gtgagtga
L.Afr	ttttaag	cgttacttcact...32...	-agtttgagcagcaagc--ttgc	ACAGGg	GAAGGGAGGCTGg	atgagtga
*	*	*****	** * ***** **	**	*****	*****

id=404342 gene=ENSG00000109819 name=PPARGC1A segment=chr4_23891755_23891836_-1 type=AN

H.Sap	tcaccaa	gtaagtattaag...29...	ggttctaatacatttggcta	CAGCaa	CTCCaTTTCag	TTTGTttt
R.Mac	tcaccaa	gtaagtattaag...29...	ggttctaatacatttggcta	CAGCaa	CTCCaTTTCag	TTTGTttt
P.Tro	tcaccaa	gtaagtattaag...29...	ggttctaatacatttggcta	CAGCaa	CTCCaTTTCag	TTTGTttt
P.Abe	tcaccaa	gtaagtattaag...29...	ggttctaatacatttggcta	CAGCaa	CTCCaTTTCag	TTTGTttt
C.Jac	tcaccaa	gtaagtattaag...29...	ggttctaatacatttggcta	CAGCaa	CTCCaTTTCag	TTTGTttt
M.Mus	tcaccaa	gtaagtattaag...29...	ggttctaatacatttggcta	CAGCaa	CTCCaTTTCag	TTTGTttt
R.Nor	tcaccaa	gtaagtattaag...29...	ggttctaatacatttggcta	CAGCaa	CTCCaTTTCag	TTTGTttt
C.Por	tcaccaa	gtaagtattaag...29...	ggttctaatacatttggcta	CAGCaa	CTCCaTTTCag	TTTGTttt
O.Cun	tcaccaa	gtaagtattaag...29...	ggttctaatacatttggcta	CAGCaa	CTCCaTTTCag	tttgtttt
C.Fam	tcaccaa	gtaagtattaag...29...	ggttctaatacatttggcta	CAGCaa	CTCCaTTTCag	TTTGTttt
F.Cat	tcaccaa	gtaagtattaag...29...	ggttctaatacatttggcta	CAGCaa	CTCCaTTTCag	TTTGTttt
B.Tau	tcaccaa	gtaagtattaag...29...	ggttctaatacatttggcta	CAGCaa	CTCCaTTTCag	TTTGTttt
E.Cab	tcaccaa	gtaagtattaag...29...	ggttctaatacatttggcta	CAGCaa	CTCCaTTTCag	TTTGTttt
L.Afr	tcaccaa	gtaagtattaag...29...	ggttctaatacatttggcta	CAGCaa	CTCCaTTTCag	TTTGTttt
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id=404386 gene=ENSG00000109819 name=PPARGC1A segment=chr4_23826008_23826085_-1 type=IN VIEW

Figure 326:



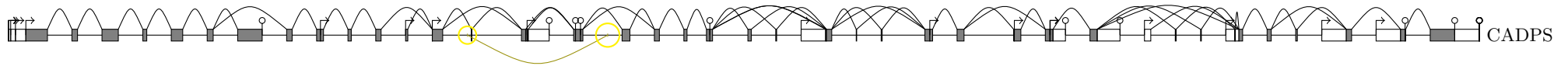
H.Sap	cgtctCTA	GTAAGaACCCT	tcctactgtttagcagg	aattggag
R.Mac	cgtctCTA	GTAAGaACCCT	tcctactgtttagcagg	aattggag
P.Tro	cgtctCTA	GTAAGaACCCT	tcctactgtttagcagg	aattggag
P.Abe	cgtctCTA	GTAAGaACCCT	tcctactgtttagcagg	aattggag
C.Jac	cgtctCTA	GTAAGaACCCT	tcctactgtttagcagg	aattggag
M.Mus	cgtctCTA	GTAAGaACCCT	tcctactgcttaacagt	ggtcagag
R.Nor	cgtctCTA	GTAAGaACCCT	tcctactgcttaactgt	ggtcagag
C.Por	cctctCTA	GTAAGaACCCT	tcctattgtttagcaga	aaaccgag
O.Cun	cgtctCTA	GTAAGaACCC	gtcctcctggttagcagc	aactggag
F.Cat	cgtctCTA	GTAAGAACCCT	ccTAGTGTTA	acggg
B.Tau	cgtctCTA	GTAAGaACCCT	tcctactgtttaacagg	aattggag
E.Cab	cgtctCTA	GTAAGaACCCT	tcctactgtttaacagg	aattggag
L.Afr	catctCTA	GTAAGaACCCT	tcctactgtttaacagc	aattggag
	* ** ** *	***** ** ** *		***

id=404373 gene=ENSG00000109819 name=PPARGC1A segment=chr4_23833152_23833179_-1 type=AN

H.Sap	ttgttaag	gtacaaatgtaa...567...	-----attcacaataaaggcgctgt	AGGGTCTTGTTAG	ttacatgttgctgagtagga...214...	ctgtttttaag	actgagaa
R.Mac	ttgttaag	gtacaaatgtaa...569...	-----attcacagtaaaggcgctgt	AGGGTCTTGTTAG	ttacatgttgctgagtagga...214...	ctgtttttaag	actgagaa
P.Tro	ttgttaag	gtacaaatgtaa...567...	-----attcacaataaaggcgctgt	AGGGTCTTGTTAG	ttacatgttgctgagtagga...214...	ctgtttttaag	actgagaa
P.Abe	ttgttaag	gtacaaatgtaa...566...	-----attcacaataaaggcgctgt	AGGGTCTTGTTAG	ttacatgttgctgagtagga...214...	ctgtttttaag	actgagaa
C.Jac	ttgttaag	gtacaaatgtaa...570...	-----attcacagtaaaggcgctgt	AGGGTCTTGTTAG	ttacatgttgctgagtagga...214...	ctgtttttaag	actgagaa
M.Mus	ttgttaag	gtgcgcatgcaa...572...	-----cctcacagtaaaggcgctgt	AGGGTCTTGTTAG	ttacatgttgctgagtagga...215...	ctgtttttaag	accgagaa
R.Nor	ttgttaag	gtgcgcatgcaa...568...	-----cctcacagtaaaggcgctgt	AGGGTCTTGTTAG	ttacatgttgctgagtagga...226...	ctgtttttaag	accgagaa
C.Por	ttgttaag	gtacagccagca...570...	-----atacagagtaaaggcgctgt	AGGGTCTTGTTAG	ttacatgttgctgagtagga...213...	ctgtttttaag	accgagaa
O.Cun	ttgttaag	gtacaaacgtaa...610...	-----ttcacagtaaaggcgctgt	AGGGTCTTGTTAG	ttacatgttgctgagtagga...212...	cctgtttttaag	actgagaa
F.Cat	tcgttaag	gtacgatgtgaa...555...	ttattttttttattcacagTAAAggCGCTA	AGGGTCTTGTTAG	ttacatgttgctgagtagga...215...	ctcgtttttaag	accgagaa
B.Tau	ttgttaag	gtacaattgtaa...570...	-----attcacagtaaaggcgctgt	AGGGTCTTGTTAG	ttacatgttgctgagtagga...213...	ctgtttttaag	accgagaa
E.Cab	ttgttaag	gtacaaacgtaa...577...	-----attcacagtaaaggcgctgt	AGGGTCTTGTTAG	ttacatgttgctgagtagga...213...	ctgtttttaag	accgagaa
L.Afr	ttgttaag	gtacaaactatt...566...	-----attcacagtaaaggcgctgt	AGGGTCTTGTTAG	ttacatgttgctgagtagga...213...	ctgtttttaag	accgagac
	* ** ** *	** *		** * ***** ** ** *		*****	** ****

id=404378 gene=ENSG00000109819 name=PPARGC1A segment=chr4_23830228_23831085_-1 type=IN VIEW

Figure 327:



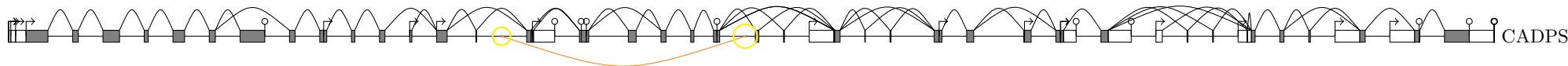
H. Sap	tcaat	gtaag	4913	ctgag	TTATG	ATTCTGGT	TGTT	ccttc	ctgac	ctggactg
R. Mac	tcaat	gtaag	4913	ctgag	TTATG	ATTCTGGT	TGTT	ccttc	ctgac	ctggactg
P. Tro	tcaat	gtaag	4913	ctgag	TTATG	ATTCTGGT	TGTT	ccttc	ctgac	ctggactg
P. Abe	tcaat	gtaag	4913	ctgag	TTATG	ATTCTGGT	TGTT	ccttc	ctgac	ctggactg
C. Jac	tcaat	gtaag	4913	ctgag	TTATG	ATTCTGGT	TGTT	ccttc	ctgac	ctggactg
M. Mus	acaat	gtaag	4311	ctgag	TTATG	ATTCTGGT	TGTT	ccttc	ctgac	ctggactg
R. Nor	ccaat	gtaag	4231	ctgag	TTATG	ATTCTGGT	TGTT	ccttc	ctgac	ctggaccg
C. Por	acaat	gtaag	4058	ctgag	TTATG	ATTCTGGT	TGTT	ccttc	ctgac	ctggactg
O. Cun	tcaat	gtaag	4498	ctgag	TTATG	ATTCTGGT	TGTT	ccttc	ctgac	ctggactg
C. Fam	ccaat	gtaag	4679	ctgag	TTATG	ATTCTGGT	TGTT	ccttc	ctgac	ctggactg
F. Cat	ccaat	gtaag	4681	ctgag	TTATG	ATTCTGGT	TGTT	ccttc	ctgac	ctggactg
B. Tau	ccaat	gtaag	4730	ctgag	TTATG	ATTCTGGT	TGTT	ccttc	ctgac	ctggactg
L. Afr	tcaat	gtaag	4913	ctgag	TTATG	ATTCTGGT	TGTT	ccttc	ctgac	ctggactg
	** ** *	***** * *		*****						***** *

id=798340 gene=ENSG00000163618 name=CADPS segment=chr3_62530535_62535577_-1 type=IN

H. Sap	gggaacag	gtaagtgtgtgt	1717	tttttg	AACATc	ATCA	GAATTATGA	tacacattgtctggatttca	257	ccctctc	caaaag	tcaacaaa
R. Mac	gggaacag	gtaagtgtgtgt	1711	tttttg	AACATc	ATCA	GAATTATGA	tacacattgtctggatttca	257	ccctctc	caaaag	tcaacaaa
P. Tro	gggaacag	gtaagtgtgtgt	1705	tttttg	AACATc	ATCA	GAATTATGA	tacacattgtctggatttca	257	ccctctc	caaaag	tcaacaaa
P. Abe	gggaacag	gtaagtgtgtat	1706	tttttg	AACATc	ATCA	GAATTATGA	tacacattgtctggatttca	257	ccctctc	caaaag	tcaacaaa
C. Jac	gggaacag	gtaagtggctat	1701	tttttg	AACATc	ATCA	GAATTATGA	tacacattgtctggatttca	255	ccccctc	caaaag	tcaacaaa
M. Mus	ggtaaacag	gtaagcatgggt	2034	tttttg	AACATc	ATCA	GAATTATGA	tacacattgtctgggtttca	257	ccctctc	caaaag	tcaacaaa
R. Nor	gggaacag	gtaagcatgggt	1865	tttttg	AACATc	ATCA	GAATTATGA	tacacattgtctgggtttca	300	tcctctc	caaaag	tcaacaaa
C. Por	ggcaaacag	gtaagcaagcag	1778	tttttg	AACATc	ATCA	GAATTATGA	tacacattgtctggatttca	265	ccctctc	caaaag	tcaacaaa
O. Cun	gggaatag	gtgagcacatgt	2079	tttttg	AACATc	ATCA	GAATTATGA	tacacattgtctggatttca	258	ccctctc	caaaag	tcaacaaa
C. Fam	gggaacag	gtaagcactatc	1935	tttttg	AACATc	ATCA	GAATTATGA	tacacattgtctggatttca	267	ccctctc	caaaag	tcaacaaa
F. Cat	gggaacag	gtaagcacttgt	1686	tttttg	AACATc	ATCA	GAATTATGA	tacacattgtctggatttca	266	ccctctc	caaaag	tcaacaaa
B. Tau	gggaacag	gtaggcacgtgt	1442	tttttg	AACATc	ATCA	GAATTATGA	tacacattgtctggatttca	268	ccccctc	caaaag	tcaacaaa
L. Afr	gggaacag	gtaggcatgttt	1869	tttttg	AACATc	ATCA	GAATTATGA	tacacattgtctggatttca	261	gccccctc	caacag	tcagcaaa
	** ** **	** *		*****						** ** *	** ** *	*** **

id=798351 gene=ENSG00000163618 name=CADPS segment=chr3_62516488_62518545_-1 type=IN VIEW

Figure 328: CS=3.9



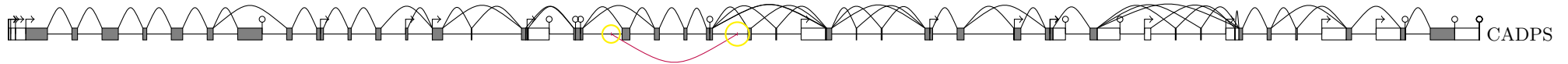
H.Sap	actgaagg	gtaagtgtctccc...4715...-----caacataaatgactggaaa	TGTGATCA	TTGAT	aaacatgttgatgccaatat...196...ataaatgaacag	acgcagat
P.Tro	actgaagg	gtaagtgtctccc...4715...-----caacataaatgactggaaa	TGTGATCA	TTGAT	aaacatgttgatgccaatat...196...ataaatgaacag	acgcagat
P.Abe	actgaagg	gtaagtgtctccc...4715...-----caacataaatgactggaaa	TGTGATCA	TTGAT	aaacatgttgatgccaatat...196...ataaatgaacag	acgcagat
C.Jac	actgaagg	gtaagtgtctccc...4717...-----caatataaatgactggaaa	TGTGATCA	TTGAT	aaacatgttgatgccaatat...194...ataaatgaacag	acgcagat
M.Mus	actgaagg	gtaagtgtctccc...4702...--gagcaacacgaa-gcactgga	ATTGTGATCA	TTGAT	aaacatgttgatgccaatat...207...gtaaatgaacag	acgcagat
R.Nor	accgaagg	gtaagtgtctccc...4707...--gagcaacacgaa-gcactgga	ATTGTGATCA	TTGAT	aaacatgttgatgccaatat...202...gtaaatgaacag	acgcagat
C.Por	actgaagg	gtaagtgtctccc...4712...--aaccagatgaatgactgga	ATTGTGATCA	TTGAT	aaacatgttgatgccaatat...197...gtaaatgaacag	acgcagat
O.Cun	actgaagg	gtaagtgtctccc...4713...--aacaacataaagtgactgga	ATTGTGATCA	TTGAT	aaacatgttgatgccaatat...196...ataaatgaacag	acgcagat
C.Fam	actgaagg	gtaagtgtctccc...4710...aagaacaacataaatgact	GGAGTTGTGATCA	TTGAT	acacacgttgatgccaatat...196...ataaatgaacag	acgcagat
F.Cat	actgaagg	gtaagtgtctccc...4710...aagaacaacataaatgact	GGAGTTGTGATCA	TTGAT	aaacatgttgatgccaatat...196...ataaatgaacag	acgcagat
E.Cab	actgaagg	gtaagtgtctccc...4710...aagaacaacataaatgact	GGAGTTGTGATCA	TTGAT	aaacatgttgatgccaatat...196...ataaatgaacag	acgcagat
L.Afr	actgaagg	gtaagtgtctccc...4713...--aacaacataaaggcactgga	ATTGTGATCA	TTGAT	aaacatgttgatgccaatat...196...acaacgtacag	acgcagat
	** *****	***** ****	* * * *	*****	***** **	*****

id=798342 gene=ENSG00000163618 name=CADPS segment=chr3_62522257_62530522_-1 type=IN

H.Sap	aatcgaag	gtaaggctccct...2102...gctctaagagacgtgtaaa	ATCATGGTCACA	Aatctctctcgtgactcacgg-----	...174...cctcttttatag	ggaaaaag
P.Tro	aatcgaag	gtaaggctccct...2099...gctctaagagacgtgtaaa	ATCATGGTCACA	Aatctctctcgtgactcacgg-----	...174...cctcttttatag	ggaaaaag
P.Abe	aatcgaag	gtaaggctccct...2095...gctctaagagacgtgtaaa	ATCATGGTCACA	Aatctctctcgtgactcacgg-----	...174...cctcttttatag	ggaaaaag
C.Jac	aatcgaag	gtaaggctccct...2098...gctctaagagacgtgtaaa	ATCATGGTCACA	Aatctctctcgtgactcacgg-----	...174...cctcttttatag	ggaaaaag
M.Mus	aattgaag	gtaagacttcta...2137...actctaagagacgtgtaaa	ATCATGGTCACAAT	tctctctcgtggctcatggca----	...172...cctctttttag	ggaaaaag
R.Nor	aatcgaag	gtaaggctccct...2050...actctaagagacgtgtaaa	ATCATGGTCACAAT	tctctctcgtggctcatggca----	...174...cctctttttag	ggaaaaag
C.Por	aatcgaag	gtaaggctccct...2127...actctaagagacgtgtaaa	ATCATGGTCACAAT	tctctctcgtgactcacggca----	...172...cctcttttatag	ggaaaaag
O.Cun	aattgaag	gtaaggcactct...2089...gctctaagagacgtgtaaa	ATCATGGTCACAAT	tctctctcgtgactcacggca----	...172...cctcttttatag	ggaaaaag
C.Fam	aatcgaag	gtaaggctccct...2103...attctaagagacgtgtaaa	ATCATGGTCACAAT	CTCTctcgtgactcacggcatgct...	...168...cctcttttatag	ggaaaaag
F.Cat	aatcgaag	gtaaggctccct...2082...attctaagagacgtgtaaa	ATCATGGTCACAAT	CTCTctcgtgactcacggcatgct...	...169...cctcttttatag	ggaaaaag
E.Cab	aatcgaag	gtaaggctccct...2080...attctaagagacgtgtaaa	ATCATGGTCACAAT	CTCTctcgtgactcacggcatgct...	...169...cctcttttatag	ggaaaaag
L.Afr	aattgaag	gtaaggctccct...2052...gttctaagagacgtgtaaa	ATCATGGTCACAAT	tctctctcgtgactcacggca----	...174...cctcttttatag	ggaaaaag
	** *****	*****	*****	***** **	*****	*****

id=798360 gene=ENSG00000163618 name=CADPS segment=chr3_62499382_62501733_-1 type=IN VIEW

Figure 329:



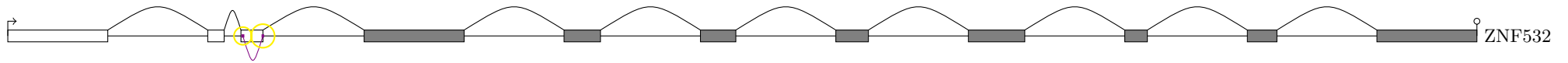
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R. Mac	gggaacag	gtaagtgtgtgt...1778...agactgccacttgattcaca	GTTAGGTTTATACaTCTT	gtcatggaaacagttttgga...192...cctctccaaag	tcaacaaa
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P. Abe	gggaacag	gtaagtgtgtat...1773...agactgccacttgattcaca	GTTAGGTTTATACaTCTT	gtcatggaaacagttttgga...192...cctctccaaag	tcaacaaa
C. Jac	gggaacag	gtaagtggctat...1768...agactgccacttgattcaca	GTTAGGTTTATACaTCTT	gtcatggaaacagttttgga...190...ccccctccaaag	tcaacaaa
M. Mus	ggtaacag	gtaagcatgggt...2101...agactgccacttgattcaca	GTTAGGTTTATACATCTT	gtcgtgggaacagtttgga...192...cctctccaaag	tcaacaaa
R. Nor	gggaacag	gtaagcatgggt...1932...agactgccacttgattcaca	GTTAGGTTTATACaTCTT	gtcgtgggaacagtttgga...235...tctctccaaag	tcaacaaa
C. Por	ggcaacag	gtaagcaagcag...1845...agactgccacttgattcaca	GTTAGGTTTATACaTCTT	gtcatggaaacagttttgga...200...cctctccaaag	tcaacaaa
O. Cun	gggaatag	gtgagcacatgt...2146...agactgccacttgattcaca	GTTAGGTTTATACaTCTT	gtcatggaaacagttttgga...193...cctctccaaag	tcaacaaa
C. Fam	gggaacag	gtaagcactatc...2002...agactgccacttgattcaca	GTTAGGTTTATACaTCTT	gtcatggaaacagttttgga...202...cctctccaaag	tcaacaaa
F. Cat	gggaacag	gtaagcacttgt...1753...agactgccacttgattcaca	GTTAGGTTTATACaTCTT	gtcatggaaacagttttgga...201...cctctccaaag	tcaacaaa
B. Tau	gggaacag	gtaggcacgtgt...1513...---tgccacttgattcacagtta	GGTTTATACaTCTT	gtcatggaaacagttttgga...203...cctctccaaag	tcaacaaa
E. Cab	gggaacag	gtaagcacatgt...1780...agactgccacttgattcaca	GTTAGGTTTATACaTCTT	gtcatggaaacagttttgga...203...cctctccaaag	tcaacaaa
L. Afr	gggaacag	gtaggcatgtt...1936...agactgccacttgattcaca	GTTAGGTTTATACaTCTT	gtcatggaaacagttttgga...196...gcccctccacag	tcagcaaa
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id=798351 gene=ENSG0000163618 name=CADPS segment=chr3_62516488_62518545_-1 type=IN

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P. Tro	aatcgaag	gtaaggctccct...2087...ttcttgcaaacagctctaaa	GAGAcGTGTaAAATCaTGGT	cacaatctctctcgtgactc...178...cctcttttatag	ggaaaaag
P. Abe	aatcgaag	gtaaggctccct...2083...ctcttgcaaacagctctaaa	GAGAcGTGTaAAATCaTGGT	cacaatctctctcgtgactc...178...cctcttttatag	ggaaaaag
C. Jac	aatcgaag	gtaaggctccct...2086...ttcttgcaaacagctctaaa	GAGAcGTGTaAAATCaTGGT	cacaatctctctcgtgactc...178...cctcttttatag	ggaaaaag
M. Mus	aattgaag	gtaagacttcta...2125...ttcttgccaacaactctaaa	GAGATGTGTaAAATCaTGGT	cacaatctctctcgtggctc...178...cctctttttag	ggaaaaag
R. Nor	aatcgaag	gtaaggtttctg...2038...ttcttgccaacagctctaaa	GAGAcGTGTaAAATCaTGGT	cacaatctctctcgtggctc...180...cctctttttag	ggaaaaag
C. Por	aatcgaag	gtaaggctccct...2115...ttcttgccaacaactctaaa	GAGAcGTGTaAAATCaTGGT	cacaatctctctcgtgactc...178...cctcttttatag	ggaaaaag
O. Cun	aattgaag	gtaaggcactct...2077...ttcttgcaaacagctctaaa	GAGAcGTGTaAAATCaTGGT	cacaatctctctcgtgactc...178...cctcttttatag	ggaaaaag
C. Fam	aatcgaag	gtaaggctccct...2091...ctcttgcaaacagctctaaa	GAGAcGTGTaAAATCaTGGT	cacaatctctctcgtgactc...178...cctcttttatag	ggaaaaag
F. Cat	aatcgaag	gtaaggctccct...2070...ctcttgccaacaattctaaa	GAGAcGTGTaAAATCaTGGT	cacaatctctctcgtgactc...179...cctcttttatag	ggaaaaag
B. Tau	aatcgaag	gtaagaccctc...2090...ttcttgcaataattctaaa	GAGAcGTGTaAAATCaTGGT	cacagtcacaatctctcgtgactc...184...cctcttttatag	ggaaaaag
E. Cab	aatcgaag	gtaaggctccct...2068...ttcttgcaaacagctctaaa	GAGAcGTGTaAAATCaTGGT	cacaatctctctcgtgactc...178...cctcttttatag	ggaaaaag
L. Afr	aattgaag	gtaaggcttctc...2040...ttcttgcaaacagctctaaa	GAGAcGTGTaAAATCaTGGT	cacaatctctctcgtgactc...180...cctcttttatag	ggaaaaag
	*** ** *	*****	*****	*****	*****

id=798360 gene=ENSG0000163618 name=CADPS segment=chr3_62499382_62501733_-1 type=IN VIEW

Figure 331:



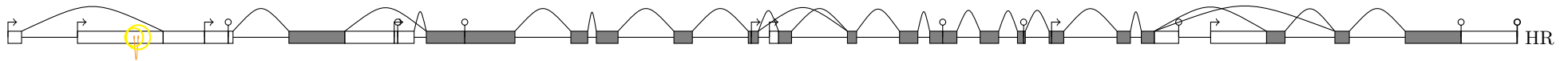
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P.Tro	c	CTTGTaG	GCCTgtTGACT	ggggctgcttttaacccttt...67...aaggttcacaag	gtgagata
P.Abe	c	CTTGTaG	GCCTgtTGACT	ggggctgcttttaacccttt...68...aaggttcacaag	gtgagata
C.Jac	c	CTTGTaG	GCCTgtTGACT	ggggctgcttttaacccttt...67...aaggttcacaag	gtgagata
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C.Por	c	CTTGTaG	GCCTgtTGACT	ggggctgcttttaacccttt...67...aaggttcacaag	gtgagata
O.Cun	c	CTTGTaG	GCCTgtTGACT	ggggctgcttttaacccttt...67...aaggttcacaag	gtgagata
C.Fam	c	CTTGTaG	GCCTgtTGACT	ggggctgcttttaacccttt...67...aaggttcacaag	gtgagata
F.Cat	c	CTTGTaG	GCCTgtTGACT	ggggctgcttttaacccttt...67...aaggttcacaag	gtgagata
B.Tau	c	CTTGTaG	GCCTgtTGACT	ggggctgcttttaacccttt...67...aaggttcacaag	gtgagaaa
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O.Avi	c	CTTGTaG	GCCTgtTGACT	ggggctgcttttaacccttt...68...aaggttcacaag	gtgagaaa
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id=209116 gene=ENSG0000074657 name=ZNF532 segment=chr18.56532702.56532811.1 type=E5

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P.Tro	c	cttgtag	gcctgttgactg...62...ggtctaaagtctttcAAAA	GGTC-AAGGTTcACAAG	Gtgagata
P.Abe	c	cttgtag	gcctgttgactg...62...ggtctaaagtctttcAAAA	GGTC-AAGGTTcACAAG	Gtgagata
C.Jac	c	cttgtag	gcctgttgactg...62...ggtctaaagtctttcAAAA	GGTC-AAGGTTcACAAG	Gtgagata
M.Mus	c	cttgtag	gcctgttgactg...62...gggccaaagtctttcAAAA	GGTC-AAGGTTcACAAG	Gtgagata
C.Por	c	cttgtag	gcctgttgactg...62...gatccaaagtctttcAAAA	GGTC-AAGGTTcACAAG	Gtgagata
O.Cun	c	cttgtag	gcctgttgactg...62...ggtccaaagtctttcAAAG	GGTC-AAGGTTcACAAG	Gtgagata
C.Fam	c	cttgtag	gcctgttgactg...62...gggccaaagtctttcAAAA	GGTC-AAGGTTcACAAG	Gtgagata
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B.Tau	c	cttgtag	gcctgttgactg...62...ggtccaaagtctttcAAAA	GGTC-AAGGTTcACAAG	Gtgagaaa
E.Cab	c	cttgtag	gcctgttgactg...62...ggtccaaagtctttcAAAA	GGTC-AAGGTTcACAAG	Gtgagata
O.Avi	c	cttgtag	gcctgttgactg...63...ggtccaaagtctttcAAAA	GGTC-AAGGTTcACAAG	Gtgagaaa
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id=209116 gene=ENSG0000074657 name=ZNF532 segment=chr18.56532702.56532811.1 type=E5 VIEW

Figure 332:



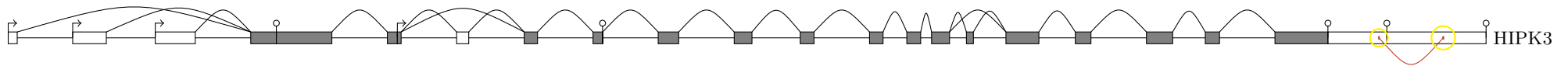
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M.Mus	caatgttc	cctcccaggagc...401...cccatcactgaccctgaga----	ACCCGacTGCCccTGCC	-----agctctggcactgaccctc...344...tgtttcccgcag	ggtgctgg
R.Nor	caatgttc	cctcccaggagc...517...-tcccgccctttgctccagtt----	CCCGGGCTTGCCA	-----cctatagtggggggtgctgcc...229...tgtttcccgcag	ggtgctgg
C.Por	ctcaattc	cctcccagggcc...503...ctcccgctcctttgctccagt----	TCCCGGGCTTGCCA	-----cctatagtggggggtgctgcc...230...tgtttcccgcag	ggtgctgg
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S.Sus	ctctgctc	cctcccaggggc...470...ctcccgccctttgctccagt----	TCCCGGGCTTGCCA	-----cctatagtggggggtgctgcc...230...tgtttcccgcag	ggtgctgg
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id=308052 gene=ENSG00000168453 name=HR segment=chr8_21988566_21989381_-1 type=AN

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E.Cab	ctctgttc	cctcccaggagc...692...gtggcatgcggggcgcttg	GCGGaaGCCCCGGGGCCTG	:::gcgcccgaatcacgggctcctgtttcccgcag	ggtgctgg
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Figure 333:



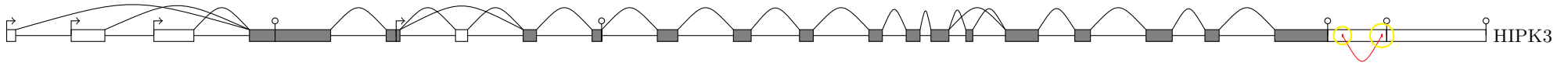
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R. Mac	-atatgtga	aaaacagtatat...412...cctaagaaattgagctattg	TTCTTACATTTGCATGTGTct	TTTG	catgggcaaaatgttgcccta...32...-agctgcattgta	aaccgttc
P. Tro	-atatgtga	aaaacagtatat...412...cctaagaaattgagctattg	TTCTTACATTTGCATGTGTct	TTTG	catgggcaaaatgttgcccta...33...-agctgcattgta	aaccgttc
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C. Por	-atatgtga	aaaatcaaaagc...425...cctaagaaattgagctattg	TTCTTACATTTGCATGTGTct	TTTG	catgggcaaaatgttgcccta...32...-agctgcattgta	aaccgttc
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C. Fam	-atatgtga	aaactcaaaagc...421...cctaagaaattgagctatcg	TTCTTACATTTGCATGTGTc-	TTTG	catgggcaaaatgttgcccta...33...-agctgcattgta	aaccgttc
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O. Avi	-atatgtga	aaactcacaagc...424...cctaagaaattgagctattg	TTCTTACATTTGCATGTGTc-	TTTG	catgggcaaaatgttgcccta...33...-agctgcattgta	aaccgttc
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R. Mac	-gcattgta	aaccgttccac...2440...ggactgtgttaagtaaaagt	TAAAtcATACAc	TGCAAGgTGTAGGAA	gatttgtttaaatgaatcca--...349...tattgcagcaaa	cagcttgt
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P. Abe	-gcattgta	aaccgttccac...2780...ggactgtgttaagtaaaagt	TAAAtcATACAc	TGCAAGgTGTAGGAA	gatttgtttaaatgaatcca--...349...tattgcagcaaa	cagcttgt
M. Mus	tgattgt-	aaccgttccac...2395...ggcttgtgttctgtaaaagt	TAAAtcATACAc	TGCAAGgTGTAGGAA	gattcattttaaaccatcca--...343...tattgcggcaaa	cagcttgc
R. Nor	-gcattgta	aaccgttccac...2412...ggcttgtgttctgtaaaagt	TAAAtcATACAc	TGCAAGgTGTAGGAA	gattcattttaaaccatcca--...341...tattgcagcaaa	cagcttgc
C. Por	-gcattgta	aaccgttccac...2477...ggtttgtgttatgtaaaagt	TAAAtcATACAc	TGCAAGgTGTAGGAA	gatttgtttcatgaacca--...350...tattgcagcaaa	cagcttgc
O. Cun	-gcattgta	aaccgttccac...2456...ggtttgtgttaagtaaaagt	TAAAtcATACAc	TGCAAGgTGTAGGAA	gatttgtttaaatgaatcca--...350...tattgcagcaaa	cagcttgc
C. Fam	-gcattgta	aaccgttccac...2467...gatttgtgttaagtaaaagt	TAAAtcATACAc	TGCAAGgTGTAGGAA	gatttgtttaaatgaacca--...344...tattgcagcaaa	cagcttgc
B. Tau	-gcattgta	aaccgttccac...2472...ggtttgtgttaagtaaaagt	TAAAtcATACAc	TGCAAGgTGTAGGAG	gatttgtttaagaacca--...341...tattgcagcaaa	cagcttgc
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id=443862 gene=ENSG0000110422 name=HIPK3 segment=chr11.33375646_33378569.1 type=E3 VIEW

Figure 336:



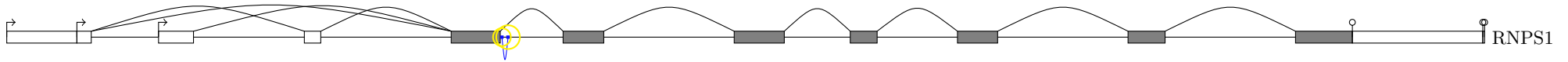
H. Sap	-atatgtga	aaaacagtatat...77...-----tatttttgaatcatgtagac	TTGGGtGCAATTTAaaCAACTTTG	agctttt---aa--aaactcactttt---...366...-agctgcattgta	aaccgttc
R. Mac	-atatgtga	aaaacagtatat...81...-----tatttttgaatcatgtagac	TTGGGtGCAATTTAaaCAACTTTG	agctttt---aa--aaactcactttt---...365...-agctgcattgta	aaccgttc
P. Tro	-atatgtga	aaaacagtatat...81...-----tatttttgaatcatgtagac	TTGGGtGCAATTTAaaCAACTTTG	agctttt---aa--aaactcactttt---...366...-agctgcattgta	aaccgttc
P. Abe	-atatgtga	aaaacagtatat...81...-----tatttttgaatcatgtagac	TTGGGtGCAATTTAaaCAACTTTG	agctttt---aa--aaactcactttt---...366...-agctgcattgta	aaccgttc
M. Mus	-aaaactcg	aaagcagtctat...91...-----tcatgtagacttgggtgcaa	-----TTTAaaCAACTTTG	agctttt-aaaa--aaactcactt-----...369...cagctgcattgt-	aaccgttc
R. Nor	-aaaactcg	aaagcagtttat...91...-----tcatgtagacttgggtgcaa	-----TTTAaaCAACTTTG	agctttt-aaaa--aaactcactt-----...368...-agctgcattgta	aaccgttc
C. Por	-atatgtga	aaaatcaaaagc...81...gaaaattatttttgaatcat	GTAGacTTGGGtGCAATTTAaaCAACTTTG	agcttttaaaaa--aaaatctca-----...372...-agctgcattgta	aaccgttc
O. Cun	-aaaactca	aaaacagtatat...80...-----tatttttgaatcatgtagac	TTGGGtGCAATTTAaaCAACTTTG	agcttttaaaaa--aaactcacttttaat...367...-agctgcattgta	aaccgttc
C. Fam	-atatgtga	aaactcaaaagc...86...-----tatttttgaatcatgtagac	TTGGGtGCAATTTAaaCAACTTTG	agcttttaaaaa--aaattcact-----...369...-agctgcattgta	aaccgttc
F. Cat	-aaaactcc	aaaagagtatat...81...-----tatttttgaatcatgtagac	TTGGGtGCAATTTAaaCAACTTTG	agcttttaaaaa--aaaaaaaa-----...381...-agctgcattgta	aaccgttc
B. Tau	-atatgtga	aaactcataaga...80...gaaaattatttttgaatcat	GTAGacTTGGGtGCAATTTAaaCAACTTTG	agcttttaaaaaagaaactca-----...372...-agctgcattgta	aaccgttc
E. Cab	-aaaactca	aaaagagtatat...80...-----tatttttgaatcatgtagac	TTGGGtGCAATTTAaaCAACTTTG	agctttt-aaaa--aaactcactt-----...368...-agctacattgta	aaccgttc
S. Sus	gaaaactc	aaaagagtatat...80...-----tatttttgaatcatgtagac	TTGGGtGCAATTTAaaCAACTTTG	agcttttaaaaa--aaactcactt-----...361...-agctgcattgta	aaccgttc
O. Avi	-atatgtga	aaactcacaagc...86...-----tatttttgaatcatgtagac	TTGGGtGCAATTTAaaCAACTTTG	agcttttaaaaaagaaactca-----...372...-agctgcattgta	aaccgttc
L. Afr	gaaaactc-	aaaacagtatat...81...-----tatttttgaatcatgtagac	TTGGGtGCAATTTAaaCAACTTTG	agcttttaaaaa--aaaaaaaa-----...384...-agctgcattgta	aaccgttc
	* * *	***	* * * * *	*****	** **
				****	*****

id=443861 gene=ENSG00000110422 name=HIPK3 segment=chr11_33375115_33375645.1 type=E3

H. Sap	-atatgtga	aaaacagtatat...440...---gcatgtgtcttttgc	atggcGAAAatGTTGccTAGA	ctTTGCtCTTAAatg	tgttcttaataatctcagctgcattgta	aaccgttc	
R. Mac	-atatgtga	aaaacagtatat...444...---gcatgtgtcttttgc	atggcGAAAatGTTGccTAGA	ctTTGCtCTTAAatg	tgttcttaataatctcagctgcattgta	aaccgttc	
P. Tro	-atatgtga	aaaacagtatat...444...---gcatgtgtcttttgc	atggcGAAAatGTTGccTAGA	ctTTGCtCTTAAatg	tgttcttaataatctcagctgcattgta	aaccgttc	
P. Abe	-atatgtga	aaaacagtatat...444...---gcatgtgtcttttgc	atggcGAAAatGTTGccTAGA	ctTTGCtCTTAAatg	tgttcttaataatctcagctgcattgta	aaccgttc	
M. Mus	-aaaactcg	aaagcagtctat...449...---gcatgtgtcttttgc	atggcGAAAacGTTGccTAGA	-cttggccttaaatg	tgttgaataactctcagctgcattgt-	aaccgttc	
R. Nor	-aaaactcg	aaagcagtttat...447...---gcatgtgtcttttgc	atggcGAAAatGTTGccTAGA	-cttggccttaaatg	tgttgaataatctcagctgcattgta	aaccgttc	
C. Por	-atatgtga	aaaatcaaaagc...457...---gcatgtgtcttttgc	atggcGAAAatGTTGccTAGA	ctTTGCtCTTAA-tg	TTGTtctaataatctcagctgcattgta	aaccgttc	
O. Cun	-aaaactca	aaaacagtatat...446...tttgc	atgtgtcttttgc	atggcGAAAAGGTTGccTAGA	ctTTGCtCTTAAacg	tgttcttaataatctcagctgcattgta	aaccgttc
C. Fam	-atatgtga	aaactcaaaagc...452...---tg	catgtgtc-tttgc	atggcGAAAatGTTGccTAGA	ctTTGCtCTTAAatg	tgttccaataatctcagctgcattgta	aaccgttc
F. Cat	-aaaactcc	aaaagagtatat...459...---tg	catgtgtc-tttgc	atggcGAAAatGTTGccTAGA	ctTTGCtCTTAAatg	tgttccaataatctcagctgcattgta	aaccgttc
B. Tau	-atatgtga	aaactcataaga...455...---tg	catgtgtc-tttgc	atggcGAAAatGTTGccTAGA	ctTTGCtCTTAAatg	TTGTtctaataatctcagctgcattgta	aaccgttc
E. Cab	-aaaactca	aaaagagtatat...445...---tg	catgtgtc-tttgc	atggcGAAAacGTTGccTAGA	ctTTGCtCTTAAatg	tgttccaataatctcagctgcattgta	aaccgttc
S. Sus	gaaaactc-	aaaagagtatat...438...---tg	catgtgtc-tttgc	atggcGAAAatGTTGccTAGA	ctTTGCtCTTAAatg	tgttccaataatctcagctgcattgta	aaccgttc
O. Avi	-atatgtga	aaactcacaagc...455...---tg	catgtgtc-tttgc	atggcGAAAatGTTGccTAGA	ctTTGCtCTTAAatg	tgttccaataatctcagctgcattgta	aaccgttc
L. Afr	gaaaactc-	aaaacagtatat...462...---g	catgtgtc-ttttgc	atggcGAAAatGTTGccTAGA	ctTTGCtCTTAAatg	tgttccaataatctcagctgcattgta	aaccgttc
	* * *	***	*****	*****	***	* * * * *	

id=443861 gene=ENSG00000110422 name=HIPK3 segment=chr11_33375115_33375645.1 type=E3 VIEW

Figure 337:



H. Sap	aGCACTAG	GtAAATC	---cttctgtaagat	ttttctag---	..203...	ctcaccatccag	ggctcctt
R. Mac	aGCACTAG	GtAAATC	---cttctgtaagat	ttttctag---	..195...	ctcaccatccag	ggctcctt
P. Tro	aGCACTAG	GtAAATC	---cttctgtaagat	ttttctag---	..203...	ctcaccatccag	ggctcctt
C. Jac	aGCACTAG	GtAAATC	---cttctgtaagat	ttttctag---	..199...	ctcaccatccag	ggctcctt
R. Nor	aGCACTAG	GtAAATC	---cttctgtaagat	ttttctagt--	..189...	cttaccatgcag	ggctcctt
C. Por	aGCACTAG	GtAAATC	---cttctgtaagat	ttttctag---	..200...	cccaccaccag	ggctcctt
O. Cun	aGCACTAG	GtAAATC	---ctcctgccagat	ttttctag---	..164...	ctcaccgtgcag	ggctcctt
C. Fam	aGCACTAG	GtAAATC	---cttctgtcagat	ttttctag---	..201...	ctcaccatccag	ggctcctt
F. Cat	aGCACTAG	GtAAATC	---cttctgtcagat	ttttctag---	..199...	ctcaccatccag	ggctcctt
B. Tau	aGCACTAG	GtAAATC	---cttctgtcagat	ttttctag---	..203...	ctcactgtccag	ggcgcctt
E. Cab	aGCACTAG	GtAAATC	---cttctgtcagat	ttttctag---	..202...	ctcaccatccag	ggctcctt
S. Sus	aGCACTAG	GtAAATC	cttccttctgtcagat	tttt-----	..206...	ctcaccgtccag	ggctcctt
O. Avi	aGCACTAG	GtAAATC	---cttctgtcagat	ttttctag---	..203...	ctcactgtccag	ggcgcctt
L. Afr	aGCACTAG	GtAAATC	---ctgccagat	ttttctagtgc..	..182...	ctcaccatccag	ggctcctt
	*****	*****	***	*****		* **	** *** ** *

id=27853 gene=ENSG00000205937 name=RNPS1 segment=chr16_2314333_2314573_-1 type=IN

H. Sap	agcactag	gtaa---tccttctgtaa	GATTttTCTAGTGCT	ac-ttgggggtgcttactgct...	179...	ctcaccatccag	ggctcctt
R. Mac	agcactag	gtaa---tccttctgtaa	GATTttTCTAGTGCT	ac-ttgggggtgcttactgct...	171...	ctcaccatccag	ggctcctt
P. Tro	agcactag	gtaa---tccttctgtaa	GATTttTCTAGTGCT	ac-ttgggggtgcttactgct...	179...	ctcaccatccag	ggctcctt
C. Jac	agcactag	gtaa---tccttctgtaa	GATTttTCTAGTGCT	actttgggggtgcttactgc...	175...	ctcaccatccag	ggctcctt
R. Nor	agcactag	gtaa---tcc-tctgtaa	GATTttTCTAGTGCT	a-tttgggggtgcttactgct...	166...	cttaccatgcag	ggctcctt
C. Por	agcactag	gtaa---tccttctgtaa	GATTttTCTAGTGCT	actttgggggtgctcactga...	176...	cccaccaccag	ggctcctt
O. Cun	agcactag	gtaa---tccttctgtaa	GATTttTCTAGTGCT	acatcgggggtgctcaccgc...	140...	ctcaccgtgcag	ggctcctt
C. Fam	agcactag	gtaa---tccttctgtca	GATTttTCTAGTGCT	actttgggggtgctcattac...	177...	ctcaccatccag	ggctcctt
F. Cat	agcactag	gtaa---tccttctgtca	GATTttTCTAGTGCT	actttgggggtgctcgttac...	175...	ctcaccatccag	ggctcctt
B. Tau	agcactag	gtaa---tccttctgtca	GATTttTCTAGTGCT	actttgggggtgctcgtttgc...	179...	ctcactgtccag	ggcgcctt
E. Cab	agcactag	gtaa---tccttctgtca	GATTttTCTAGTGCT	actttgggggtgctcattcc...	178...	ctcaccatccag	ggctcctt
S. Sus	agcactag	gtaatccttctgtca	GATTttTCTAGTGCT	actttgggggtactcgtttgc...	178...	ctcaccgtccag	ggctcctt
O. Avi	agcactag	gtaa---tccttctgtca	GATTttTCTAGTGCT	actttcgggggtgctcgtttgc...	179...	ctcactgtccag	ggcgcctt
L. Afr	agcactag	gtaa---tccttctgtca	GATTttTCTAGTGCT	actgtgggggtacacactac...	161...	ctcaccatccag	ggctcctt
	*****	****	***	*****	*****	* **	** *** ** *

id=27853 gene=ENSG00000205937 name=RNPS1 segment=chr16_2314333_2314573_-1 type=IN VIEW

Figure 339: CS=16.8



H. Sap	atcttgat	aataaatgtgct...127...aagcctagcctgattgcctg	AAATcTGGCAcGTACC	ctcttggaggggaggggtg...59...agctgatct-aag	gtaagacc
R. Mac	atcttgat	aataaatgtgct...127...aagcctagcctgattgcctg	AAATcTGGCAcGTACC	ctcttggaggggaggggtg...59...agctgatct-aag	gtaagacc
P. Tro	atcttgat	aataaatgtgct...127...aagcctagcctgattgcctg	AAATcTGGCAcGTACC	ctcttggaggggaggggtg...59...agctgatct-aag	gtaagacc
P. Abe	atcttgat	aataaatgtgct...127...aagcctagcctgattgcctg	AAATcTGGCAcGTACC	ctcttggaggggaggggtg...59...agctgatct-aag	gtaagacc
C. Jac	atcttgat	aataaatgtgct...127...aagcctagcctgattgcctg	AAATcTGGCAcGTACC	ctcttgggggaggggggg...59...aactgatct-aag	gtaagacc
M. Mus	atctcagt	aataaatgtgct...126...aagcctagcctgattgcctg	AAATcTGGCAcGTACC	ctcttgttgggggaggggg...54...-gcttgtgttaag	gtaatgag
R. Nor	atctcagt	aataaatgtgct...126...aagcctagcctgattgcctg	AAATcTGGCAcGTACC	ctcttgttgggggaggggg...54...-gcttgtgttaag	gtgatgag
C. Por	atcttcat	aatgaatgtgct...126...aagcctagcctgattgcctg	AAATcTGGCAcGTACC	ctcttgggggagggggcgg...51...-gccgcctgaag	gtgagaca
O. Cun	atcttgat	aataaatgtgct...127...aagcctagcctgattgcctg	AAATcTGGCAcGTACC	ctcttgggggagggggcgg...53...-gctgatctcaag	gtgagaca
C. Fam	atcttgat	aataaatgtgct...126...aagcctagcctgattgcctg	AAATcTGGCAcGTACC	ctcttgggggaggggggaa...68...-gctggtccttaag	gtgagaca
F. Cat	atcttgat	aataaatgtgct...129...cctactagcctgattgcctg	AAATcTGGCAcGTACC	ctcttgggggaggggggga...67...-tccgatcttaag	gtgagaca
E. Cab	atcttgat	aataaatgtgct...126...aagcctagcctgattgcctg	AAATcTGGCAcGTACC	ctcttaggggggagggggcg...60...-gctaactcttaag	gtgagaca
S. Sus	atcttgat	aataaatgtgct...126...aagcctagcctgattgcctg	AAATcTGGCAcGTACC	ctcttgggggagggggcg...60...-gctgatcttaag	gtgagacg
L. Afr	atgttgat	aataaatgtgct...126...aagcctagcctgattgcctg	AAATcTGGCAcGTACC	ctcttgggggaggggggtg...53...-gctggtccttaag	gtgagaca
	** * *	*** *****	***** *****	** ** * * * * *	** * **

id=681355 gene=ENSG00000159167 name=STC1 segment=chr8.23711559_23711824_-1 type=AN

H. Sap	ctttt	cct	gggaatggaata...1754...aataaacagtgagcatatct	GGTATaTGTCAttATTT	attgttaaattacattttta...161...ggtttccccca	tgtctttc
R. Mac	ctttt	cct	gggaatggaata...1799...aataaacagtgagcatatct	GGTATaTGTCAttATTT	attgttaaattacattttta...161...ggtttccccca	tgtctttc
P. Tro	ctttt	cct	gggaatggaata...2236...aataaacagtgagcatatct	GGTATaTGTCAttATTT	attgttaaattacattttta...161...ggtttccccca	tgtctttc
P. Abe	ctttt	cct	gggaatggataa...1759...aataaacagtgagcatatct	GGTATaTGTCAttATTT	attgttaaattacattttta...160...tggttccccca	tgtctttc
C. Jac	ctttt	cct	gggaatggaata...1741...aataaacagtgagcatatct	GGTATaTGTCAttATTT	attgttaaattacattttta...159...gttttccccca	tgtctttc
M. Mus	ctttt	cct	gggaatggaata...1791...aataaacagtgagcatatct	GGTATaTGTCAttATTT	attgttaaattacattttta...169...ccccctccccca	cgctctttc
R. Nor	ctttt	cct	gggaatggaata...1761...aataaacagtgagcatatct	GGTATaTGTCAttATTT	attgttaaattacattttta...166...attctccccca	cgctctttc
C. Por	ctttt	cct	gggaatggaata...1738...aataaacagtgagcatatct	GGTATaTGTCAttATTT	attgttaaattacattttta...167...ttccctcccta	tgtctttc
O. Cun	ctttt	cct	gggaatggaata...1727...aataaacagtgagcatatct	GGTATaTGTCAttATTT	attgttaaattacattttta...168...gtttccccca	tgtctttc
C. Fam	ctttt	cct	gggaatggaata...1862...aataaacagtgagcatatct	GGTATaTGTCAttATTT	attgttaaattacattttta...177...ttttctccccaa	tgtctttc
F. Cat	ctttt	cct	gggaatggaata...1799...aataaacagtgagcatatct	GGTATaTGTCAttATTT	attgttaaattacattttta...175...tttttccccaa	tgtctttc
E. Cab	ctttt	cct	gggaatggaata...1719...aataaacagtgagcatatct	GGTATaTGTCAttATTT	attgttaaattacattttta...163...atthttccccaa	tgtctttc
S. Sus	ctttt	cct	gggaatggaata...1810...aataaacagtgagcatatct	GGTATaTGTCAttATTT	attgttaaattacattttta...178...tttttccccaa	tgtctttc
L. Afr	ctttt	cct	gggaatggaata...1694...aataaacagtgagcatatct	GGTATaTGTCAttATTT	attgttaaattacattttta...168...tctttccccaa	tgtctttc
	*****	**	***** *	***** *****	***** * * * * *	*****

id=681363 gene=ENSG00000159167 name=STC1 segment=chr8.23699428_23701423_-1 type=E3 VIEW

Figure 340:



H. Sap	ctttt	cct	gggaatggaata...1755...ataaacagtgagcatatctg	GTATaTGTCATTATTAT	tgtaaattacatttttaag...159...ggtttccccca	tgtctttc
R. Mac	ctttt	cct	gggaatggaata...1800...ataaacagtgagcatatctg	GTATaTGTCATTATTAT	tgtaaattacatttttaag...159...ggtttccccca	tgtctttc
P. Tro	ctttt	cct	gggaatggaata...2237...ataaacagtgagcatatctg	GTATaTGTCATTATTAT	tgtaaattacatttttaag...159...ggtttccccca	tgtctttc
P. Abe	ctttt	cct	gggaatggataa...1760...ataaacagtgagcatatctg	GTATaTGTCATTATTAT	tgtaaattacatttttaag...158...tggttccccca	tgtctttc
C. Jac	ctttt	cct	gggaatggaata...1742...ataaacagtgagcatatctg	GTATaTGTCATTATTAT	tgtaaattacatttttaag...157...ggtttccccca	tgtctttc
M. Mus	ctttt	cct	gggaatggaata...1792...ataaacagtgagcatatctg	GTATaTGTCATTATTAT	tgtaaattacatttttaag...167...ccccctccccca	cgctcttc
R. Nor	ctttt	cct	gggaatggaata...1762...ataaacagtgagcatatctg	GTATaTGTCATTATTAT	tgtaaattacatttttaag...164...attctccccca	cgctcttc
C. Por	ctttt	cct	gggaatggaata...1739...ataaacagtgagcatatctg	GTATaTGTCATTATTAT	tgtaaattacatttttaag...165...ttccctccccca	tgtctttc
O. Cun	ctttt	cct	gggaatggaata...1728...ataaacagtgagcatatctg	GTATaTGTCATTATTAT	tgtaaattacatttttaag...166...ggttccccca	tgtctttc
C. Fam	ctttt	cct	gggaatggaata...1863...ataaacagtgagcatatctg	GTATaTGTCATTATTAT	tgtaaattacatttttaag...175...tttctccccca	tgtctttc
F. Cat	ctttt	cct	gggaatggaata...1800...ataaacagtgagcatatctg	GTATaTGTCATTATTAT	tgtaaattacatttttaag...173...tttttccccca	tgtctttc
B. Tau	ctttt	cct	gggaatggaata...1758...ataaacagtgagcatatctg	GTATaTGTCATTATTAT	tgtaaattacatttttaag...166...tttttccccca	tgtctttc
E. Cab	ctttt	cct	gggaatggaata...1720...ataaacagtgagcatatctg	GTATaTGTCATTATTAT	tgtaaattacatttttaag...161...atthttccccca	tgtctttc
S. Sus	ctttt	cct	gggaatggaata...1811...ataaacagtgagcatatctg	GTATaTGTCATTATTAT	tgtaaattacatttttaag...176...tttttccccca	tgtctttc
O. Avi	ctttt	cct	gggaatggaata...1760...ataaacagtgagcatatctg	GTATaTGTCATTATTAT	tgtaaattacatttttaag...166...tttttccccca	tgtctttc
L. Afr	ctttt	tct	gggaatggaata...1695...ataaacagtgagcatatctg	GTATaTGTCATTATTAT	tgtaaattacatttttaag...166...tcttttccccca	tgtctttc
*****	**	*****	*	*****	****	*

id=681363 gene=ENSG00000159167 name=STC1 segment=chr8_23699428_23701423_-1 type=E3

H. Sap	ctttt	cct	gggaatggaata...1826...taaaggttatgaaacatatac	ATGGTAATGACAgATGC	aagttatthttatttgcttat...89...ggtttccccca	tgtctttc
R. Mac	ctttt	cct	gggaatggaata...1871...taaaggttatgaaacatatac	ATGGTAATGACAgATGC	aagttatthttatttgcttat...89...ggtttccccca	tgtctttc
P. Tro	ctttt	cct	gggaatggaata...2308...taaaggttatgaaacatatac	ATGGTAATGACAgATGC	aagttatthttatttgcttat...89...ggtttccccca	tgtctttc
P. Abe	ctttt	cct	gggaatggataa...1831...taaaggttatgaaacatatac	ATGGTAATGACAgATGC	aagttatthttatttgcttat...88...tggttccccca	tgtctttc
C. Jac	ctttt	cct	gggaatggaata...1813...taaaggttatgaaacatatac	ATGGTAATGACAgATGC	aagttatthttatttgcttat...87...ggttccccca	tgtctttc
M. Mus	ctttt	cct	gggaatggaata...1863...taaaggttatgaaacatatac	ATGGTAATGACAgATGC	aagttatthttatttgcttat...97...ccccctccccca	cgctcttc
R. Nor	ctttt	cct	gggaatggaata...1833...taaaggttatgaaacatatac	ATGGTAATGACAgATGC	aagttatthttatttgcttat...94...attctccccca	cgctcttc
C. Por	ctttt	cct	gggaatggaata...1810...taaaggttatgaaacatatac	ATGGTAATGACAgATGC	aagttatthttatttgcttat...95...ttccctccccca	tgtctttc
O. Cun	ctttt	cct	gggaatggaata...1799...taaaggttatgaaacatatac	ATGGTAATGACAgATGC	aagttatthttatttgcttat...96...ggttccccca	tgtctttc
C. Fam	ctttt	cct	gggaatggaata...1934...taaaggttatgaaacatatac	ATGGTAATGACAgATGC	aagttatthttatttgcttat...105...tttctccccca	tgtctttc
F. Cat	ctttt	cct	gggaatggaata...1871...taaaggttatgaaacatatac	ATGGTAATGACAgATGC	aagttatthttatttgcttat...103...tttttccccca	tgtctttc
B. Tau	ctttt	cct	gggaatggaata...1829...taaaggttatgaaacatatac	ATGGTAATGACAgATGC	aagttatthttatttgcttat...96...tttttccccca	tgtctttc
E. Cab	ctttt	cct	gggaatggaata...1791...taaaggttatgaaacatatac	ATGGTAATGACAgATGC	aagttatthttatttgcttat...91...atthttccccca	tgtctttc
S. Sus	ctttt	cct	gggaatggaata...1882...taaaggttatgaaacatatac	ATGGTAATGACAgATGC	aagttatthttatttgcttat...106...tttttccccca	tgtctttc
O. Avi	ctttt	cct	gggaatggaata...1831...taaaggttatgaaacatatac	ATGGTAATGACAgATGC	aagttatthttatttgcttat...96...tttttccccca	tgtctttc
L. Afr	ctttt	tct	gggaatggaata...1766...taaaggttatgaaacatatac	ATGGTAATGACAgATGC	aagttatthttatttgcttat...96...tcttttccccca	tgtctttc
*****	**	*****	*	*****	****	*

id=681363 gene=ENSG00000159167 name=STC1 segment=chr8_23699428_23701423_-1 type=E3 VIEW

Figure 341:



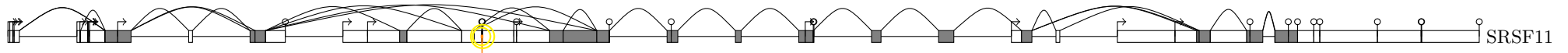
H. Sap	ttgcacaa	gtaagaccattc...	2789...	--aactcttttgattttctcac	CTCTggGG-AAAcCACAag	gagctggt
R. Mac	ttgcacaa	gtaagaccattc...	2804...	--aactcttttgattttctcac	CTCTggGG-AAAcCACAag	gagctggt
P. Tro	ttgcacaa	gtaagaccattc...	2802...	--aactcttttgattttctcac	CTCTggGG-AAAcCACAag	gagctggt
P. Abe	ttgcacaa	gtaagaccattc...	2826...	--aactcttttgattttctcac	CTCTggGG-AAAcCACAag	gagctggt
C. Jac	ttgcacaa	gtaagaccattc...	2729...	ttaactc--ttgattttctcac	CTCTggGG-AAAcCACAag	gagctggt
M. Mus	ttgcacaa	gtaaggccattc...	1896...	ttaactc--ttgattttctcac	CTCTggGG-AAAcCACAag	gagctggt
R. Nor	ttgcacaa	gtaaggccattc...	2108...	ttaactc--ttgattttctcac	CTCTggGG-AAAcCACAag	gagctggt
C. Por	ttgcacaa	gtaagaccattc...	2549...	ttaactc--ttgattttctcac	CTCTggGG-AAAcCACAag	gagctggt
O. Cun	ttgcacaa	gtaagaccattc...	2770...	ttaactc--ttgattttctcac	CTCTggGG-AAAcCACAag	gagctggt
C. Fam	ttgcacaa	gtaagaccattc...	2413...	--aactcttttgattttctcac	CTCTggGGAAAcCACAag	gagctggt
F. Cat	ttgcacaa	gtaagaccattc...	2450...	--aactcttttgattttctcac	CTCTggGG-AAAcCACAag	gagctggt
B. Tau	ttgcacaa	gtaagaccattc...	2327...	--aactcttttgattttctcac	CTCTggGG-AAAcCACAag	gagctggt
E. Cab	ttgcacaa	gtaagaccattc...	2444...	ttaactc--ttgattttctcac	CTCTggGG-AAAcCACAag	gagctggt
S. Sus	ttgcacaa	gtaagaccattc...	2792...	--aactcttttgattttctcac	CTCTggGG-AAAcCACAag	gagctggt
O. Avi	ttgcacaa	gtaagaccattc...	2308...	--aactcttttgattttctcac	CTCTggGG-AAAcCACAag	gagctggt
	*****	*****	*****	*****	*****	*****

id=614477 gene=ENSG00000175203 name=DCTN2 segment=chr12.57932308.57935146.-1 type=IN

H. Sap	ggctacag	gtattaaatgga...	46...	-gccctatcaacctt-aaaatc	TGTGTTTTTCAG	AGtgtcct
R. Mac	ggctacag	gtattaaatgga...	46...	-gccctatcaacctt-aaaatc	TGTGTTTTTCAG	AGtgtcct
P. Tro	ggctacag	gtattaaatgga...	46...	-gccctatcaacctt-aaaatc	TGTGTTTTTCAG	AGtgtcct
P. Abe	ggctacag	gtattaaatgga...	46...	-gccctatcaacctt-aaaatc	TGTGTTTTTCAG	AGtgtcct
C. Jac	ggctacag	gtaaaactgagg...	44...	-ctctatcaaccttaaaaatc	TGTGTTTTTCAG	AGtgtcct
M. Mus	ggctacag	gtattaaagtaga...	51...	-gccctgtcacctt-aacccc	TGTGTTTTTCAG	AGtgtcct
R. Nor	gactgcag	gtattaaagtaga...	51...	-gccctgtcacctt-aacacc	TGTGTTTTTCAG	AGtgtcct
C. Por	ggctacag	gtattgaggtgg...	50...	-tcactgtcagttt-aaaatc	TGTGTTTTTCAG	AGtgtcct
O. Cun	ggctacag	gtattaaagtaga...	46...	-tccccatcaatcct-aacgtc	TGTGTTTTTCAG	AGtgtcct
C. Fam	ggctacag	gtatcgaatgga...	38...	-gccctgtcagcctt-aaaatc	TGTGTTTTTCAG	AGtgtcct
F. Cat	ggctacag	gtactaagtgga...	45...	-tgccctgtcaacctt-aagtc	TGTGTTTTTCAG	AGtgtcct
B. Tau	ggttacag	gtattaaagtaga...	50...	-ttactatcaacctt-aaaatc	TGTGTTTTTCAG	AGtgtcct
E. Cab	ggctacag	gtattaaagtaga...	49...	-ctactatcctcctt-aaatc	TGTGTTTTTCAG	AGtgtcct
S. Sus	ggctacag	gtattggtggg...	47...	-tcactcctatcctt-aaaatc	TGTGTTTTTCAG	AGtgtcct
O. Avi	ggttacag	gtattaaagtaga...	41...	-tgatgcctttgcttaaaaatc	TGTGTTTTTCAG	AGtgtcct
		* * * * *			* * * * *	* * * * *

id=614497 gene=ENSG00000175203 name=DCTN2 segment=chr12.57926427.57926515.-1 type=IN VIEW

Figure 342: CS=13.5



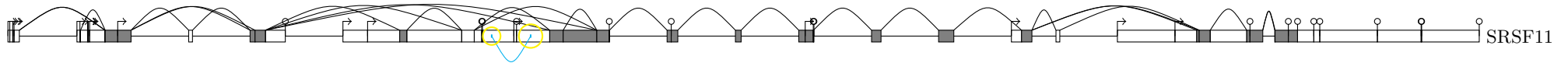
H.Sap	tacatatt	gtagtgtttatgatgagatgcagtttcttaatatgtattacagaaat	ACTACtgGTATTTGCAAAA	tatgtagt
R.Mac	tacatatt	gtagtgtttatgatgagatgcagtttcttaatatgtattacagaaat	ACTACtgGTATTTGCAAAA	tatgtagt
P.Tro	tacatatt	gtagtgtttatgatgagatgcagtttcttaatatgtattacagaaat	ACTACtgGTATTTGCAAAA	tatgtagt
P.Abe	tacatatt	gtagtgtttatgatgagatgcagtttcttaatatgtattacagaaat	ACTACtgGTATTTGCAAAA	tatgtagt
C.Jac	tacatatt	gtagtgtttatgatgagatgcagtttcttaatatgtattacagaaat	ACTACtgGTATTTGCAAAA	tatgtagt
M.Mus	tacatatt	gtagtgtttatgatgagatgcagtttcttaatatgtattacagaaat	ACTACtgGTATTTGCAAAA	tatgtagt
R.Nor	tacatatt	gtagtgtttatgatgagatgcagtttcttaatatgtattacagaaat	ACTACtgGTATTTGCAAAA	tatgtagt
C.Por	tacatatt	gtagtgtttatgatgagatgcagtttcttaatatgtattacagaaat	ACTACtgGTATTTGCAAAA	tatgtagt
O.Cun	tacatatt	gtagtgtttatgatgagatgcagtttcttaatatgtattacagaaat	ACTACtgGTATTTGCAAAA	tatgtagt
C.Fam	tacatatt	gtagtgtttatgatgagatgcagtttcttaatatgtattacagaaat	ACTACtgGTATTTGCAAAA	tatgtagt
F.Cat	tacatatt	gtagtgtttatgatgagatgcagtttcttaatatgtattacagaaat	ACTACtgGTATTTGCAAAA	tatgtagt
S.Sus	tacatatt	gtagtgtttatgatgagatgcagtttcttaatatgtattacagaaat	ACTACtgGTATTTGCAAAA	tatgtagt
O.Avi	tacatatt	gtagtgtttatgatgagatgcagtttcttaatatgtattacagaaat	ACTACtgGTATTTGCAAAA	tatgtagt
L.Afr	tacatatt	gtagtgtttatgatgagatgcagtttcttaatatgtattacagaaat	ACTACtgGTATTTGCAAAA	tatgtagt
*****	*****	*****	*****	*****

id=516453 gene=ENSG00000116754 name=SRSF11 segment=chr1_70696887_70696951_1 type=AN

H.Sap	tTTGCAAA	TATGTAGT	ttaatt
R.Mac	tTTGCAAA	TATGTAGT	ttaatt
P.Tro	tTTGCAAA	TATGTAGT	ttaatt
P.Abe	tTTGCAAA	TATGTAGT	ttaatt
C.Jac	tTTGCAAA	TATGTAGT	ttaatt
M.Mus	tTTGCAAA	TATGTAGT	ttaatt
R.Nor	tTTGCAAA	TATGTAGT	ttaatt
C.Por	tTTGCAAA	TATGTAGT	ttaatt
O.Cun	tTTGCAAA	TATGTAGT	ttaatt
C.Fam	tTTGCAAA	TATGTAGT	ttaatt
F.Cat	tTTGCAAA	TATGTAGT	ttaatt
S.Sus	tTTGCAAA	TATGTAGT	ttaatt
O.Avi	tTTGCAAA	TATGTAGT	ttaatt
L.Afr	tTTGCAAA	TATGTAGT	ttaatt
*****	*****	*****	*****

id=516454 gene=ENSG00000116754 name=SRSF11 segment=chr1_70696952_70696957_1 type=AN VIEW

Figure 343:



H. Sap	aa	tatgta	gtttaattgtat...34...aacagattaatccatctgta	TAGGGCTTTTGCTG	ttggatagaatttaaattgt...161...atggcgaaacat-	aaagcatt	
R. Mac	aa	tatgta	gtttaattgtat...34...aacagattaatccatctgta	TAGGGCTTTTGCTG	ttggatagaatttaaattgt...159...atggcgaaacat-	aaagcatt	
P. Tro	aa	tatgta	gtttaattgtat...34...aacagattaatccatctgta	TAGGGCTTTTGCTG	ttggatagaatttaaattgt...161...atggcgaaacat-	aaagcatt	
P. Abe	aa	tatgta	gtttaattgtat...34...aacagattaatccatctgta	TAGGGCTTTTGCTG	ttggatagaatttaaattgt...161...atggtgaaacat-	aaagcatt	
C. Jac	aa	tatgta	gtttaattgtat...34...aacagattaatccatctgta	TAGGGCTTTTGCTG	ttggatagaatttaaattgt...157...atggcgaaacat-	aaagcatt	
M. Mus	aa	tatgta	gtttaattgtat...34...aacagattaatccatctgta	TAGGGCTTTTGCTG	ttggatagaatttaaattgt...164...atattggaacct-	aaagcatt	
R. Nor	aa	tatgta	gtttaattgtat...34...aacagattaatccatctgta	TAGGGCTTTTGCTG	ttggatagaatttaaattgt...163...atattggaacct-	aaagcatt	
C. Por	aa	tatgta	gtttaattgtat...34...aacagattaatccatctgta	TAGGGCTTTTGCTG	ttggatagaattgaaattgt...157...-tgttggaacata	aaagcatt	
O. Cun	aa	tatgta	gtttaattgtat...34...aacagattaatccatctgta	TAGGGCTTTTGCTG	ttggatagaatttaaattgt...160...atggtggacct-	aaagcatt	
C. Fam	aa	tatgta	gtttaattgtat...34...aacagattaatccatctgta	TAGGGCTTTTGCTG	ttggatagaatttaaattgt...178...atggtggaacat-	aaagcatt	
F. Cat	aa	tatgta	gtttaattgtat...34...aacagattaatccatctgta	TAGGGCTTTTGCTG	ttggatagaatttaaattgt...161...atggtggaacat-	aaagcatt	
E. Cab	aa	tatgta	gtttaattgtat...34...aacagattaatccatctgta	TAGGGCTTTTGCTG	ttggatagaatttaaattgt...161...atggtggaacat-	agagcatt	
S. Sus	aa	tatgta	gtttaattgtat...34...aacagattaatccatctgta	TAGGGCTTTTGCTG	ttggatagaatttaaattgt...162...atggtggaacat-	aaagcatt	
O. Avi	aa	tatgta	gtttaattgtat...34...aacagattaatccatctgta	TAGGGCTTTTGCTG	ttggatagaatttaaattgt...161...nnnnngaacat-	aaagcatt	
L. Afr	aa	tatgta	gtttaattgtat...33...aacagattaatccatctgta	TAGGGCTTTTGCTG	attggatagaatttaaattgt...165...ataatggaacat-	aatgcatt	
	**	*****	*****	*****	*****	*****	** * *

id=516455 gene=ENSG00000116754 name=SRSF11 segment=chr1_70696958_70697230.1 type=AN

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R. Mac	acaggtaa	ggaatgtgccat...76...--tcatattcattttcatgagt	CAGCAAAAGCCCTA	cgcttgattccaacagaata...134...tgtgctttatag	tgaagcag
P. Tro	acaggtaa	ggaatgtgccat...76...--tcatattcattttcatgagt	CAGCAAAAGCCCTA	cgcttgattccaacagaata...134...tgtgctttatag	tgaagcag
P. Abe	acaggtaa	ggaatgtgccat...76...--tcatattcattttcatgagt	CAGCAAAAGCCCTA	cgcttgattccaacagaata...134...tgtgctttatag	tgaagcag
C. Jac	acaggtaa	ggaatgtgccat...70...agaaacaatcattttcatgt--	CAGCAAAAGCCCTA	cgcttgattccaacagaata...133...tgtgctttatag	tgaagcag
M. Mus	acaggtaa	ggaatgtgccat...181...-ttcatattca-tgtcatgagt	CAGCAAAAGCCCTA	ctcttgattccaacagaata...134...tgtgctttatag	tgaagcag
R. Nor	acaggtaa	ggaatgtgccat...143...-ttcatattca-tgtcatgagt	CAGCAAAAGCCCTA	ctcttgattccaacagaata...131...tgtgctttatag	tgaagcag
C. Por	acaggtaa	ggaatgtgccat...85...--tcatattcattttcatgagt	CAGCAAAAGCCCTA	cgcttgattccaacagagta...128...tgtgctttatag	tgaagcag
O. Cun	acaggtaa	ggaatgtgccat...75...--tcatattcattttcatgagt	CAGCAAAAGCCCTA	ctcttgattccaacagaata...135...tgtgctttatag	tgaagcag
C. Fam	acaggtaa	ggaatgtgccat...81...--tcatattcattttcatgagt	CAGCAAAAGCCCTA	cgcttgattccaacagaata...135...tgtgctttatag	tgaagcag
F. Cat	acaggtaa	ggaatgtgccat...77...--tcatattcattttcatgagt	CAGCAAAAGCCCTA	cgcttgattccaacagaata...135...tgtgctttatag	tgaagcag
E. Cab	acaggtaa	ggaatgtgccat...83...--tcatgttcgttttcatgagt	CAGCAAAAGCCCTA	cccttgattccaacagaata...135...tgtgctttatag	tgaagcag
S. Sus	acaggtaa	ggaatgtgccat...77...--tcatattcattttcatgagt	CAGCAAAAGCCCTA	cgcttgattccaacagaata...135...tgtgctttatag	tgaagcag
O. Avi	acaggtaa	ggaatgtgccat...80...--tcatattcattttcatgagt	CAGCAAAAGCCCTA	ctcttgattccaacagaata...132...tgtgctttatag	tgaagcag
L. Afr	acaggtaa	ggaatgtgccat...77...--ata-attcattttcatgagt	AGCAAAAGCCCTA	cgcttgattccaacagagta...136...tgtgctttatag	tgaagcag
	*****	*** *****	* ** * *****	*****	*****

id=516457 gene=ENSG00000116754 name=SRSF11 segment=chr1_70697254_70697541.1 type=AN VIEW

Figure 344:



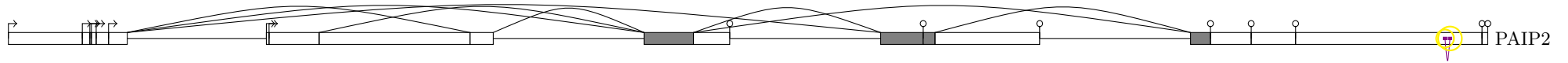
H. Sap	tcattctc	ggaagatgggcg...200...gaacaagagggcggggttg-----CGGCgaCGGAAGT	GAagTCAc
R. Mac	tcattccc	ggaagaggggcg...216...-----gagggcggggctggcggcga-----CGGAAGT	GAagTCAc
P. Tro	tcattctc	ggaagatgggcg...200...gaacaagagggcggggttg-----CGGCgaCGGAAGT	GAagTCAc
P. Abe	tcattctc	ggaagatgggacg...186...gaacaagagggcggggctgg-----CGGCgaCGGAAGT	GAagTCAc
C. Jac	tcattctc	gaaagaggggcg...202...gaacaagagggcggggctgg-----CGGCgaCGGAAGT	GAagTCAc
M. Mus	tcagtctg	gtggggctggca...151...--gtg---ggcggggcggcggtga-----CGGAAGT	GAagTCAc
R. Nor	tcagtctg	gtgggattagca...185...-----gtggcggggctggcctgga-----CGGAAGT	GAagTCAc
C. Por	ccatcctg	gagggatggaca...207...-----ggggcggggctggcgggtgga-----GGAAGT	GAagTCAc
O. Cun	tcattctc	cagggctcagcg...195...gaacgagagggcggggtcag-----TGGAggCGGAAGT	GAagTCAc
C. Fam	acattcct	gaaggatgggcg...191...gaacgagggggcggggcgg-----CGGCggCGGAAGT	GAagTCAc
B. Tau	tcattctt	gaagaatgggcg...227...--acga-gagggcggggcggcgcg-----CAGCggCGGAAGT	GAagTCAc
E. Cab	tcattctt	gaaggatgggcg...186...-----gagggcggggcgaacggcgcg-----CGGAAGT	GAagTCAc
S. Sus	ttattctt	gaaggatgggcg...182...agcagtcgggacagaacgag---AGGCGGGGCTgCGGCggCGGAAGT	GAagTCAc
O. Avi	tcattctt	gaagaatgggcg...200...-----cgagacagaacgagggcgGGGCcGGCGgCAGCgaCGGAAGT	GAagTCAc
L. Afr	tccttctc	gaaagatgggcg...194...-----ggcggggcctgtcgtggtgg-----CGGAAGT	GAggTCAc
	*	* * *	***** ** *****

id=38796 gene=ENSG00000120727 name=PAIP2 segment=chr5_138677276_138677520_1 type=E5

H. Sap	acggaaGT	GAagTCACTTCCGgGCTGgggtggt	tgtttggga
R. Mac	acggaaGT	GAagTCACTTCCGggctagggtggt	tgtttggga
P. Tro	acggaaGT	GAagTCACTTCCGgGCTGgggtggt	tgtttggga
P. Abe	acggaaGT	GAagTCACTTCCGgGCTGgggtggt	tgtttggga
C. Jac	acggaaGT	GAagTCACTTCCGCGCTGgggtggt	tgtttggga
M. Mus	acggaaGT	GAagTCACTTCCGggcaggggtggt	tgtttggga
R. Nor	acggaaGT	GAagTCACTTCCGggcaggggtggt	tgtttggga
C. Por	gaggaaGT	GAagTCACTTCC--gggctggtggt	tgtttggga
O. Cun	gcggaaGT	GAagTCACTTCCGgTCTG-ggtggt	tgtttggga
C. Fam	gcggaaGT	GAagTCACTTCCGgGCTGgggtggt	tgtttggga
B. Tau	gcggaaGT	GAagTCACTTCCGgGCTGgggtggt	tgtttggga
E. Cab	gcggaaGT	GAagTCACTTCCGggctagggtggt	tgtttggga
S. Sus	gcggaaGT	GAagTCACTTCCGgGCTGGGGTgTT	TGTTTggga
O. Avi	acggaaGT	GAagTCACTTCCGgGCTGggTgTT	GTTT-gga
L. Afr	gcggaaGT	GAagTCACTTCCGgtcttgggtggt	tgtttggga
	*****	** ***** * **	** **

id=38797 gene=ENSG00000120727 name=PAIP2 segment=chr5_138677521_138677545_1 type=E5 VIEW

Figure 345: CS=18



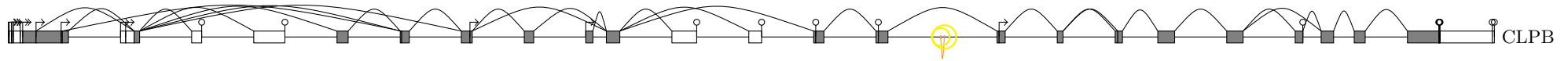
H. Sap	gacctaaa	ccttacc	aaatt...447...	cgagagtctgcagcacaact-----	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
R. Mac	gacctaaa	ccttact	aaatt...471...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
P. Tro	gacctaaa	ccttacc	aaatt...455...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
P. Abe	gacctaaa	ccttact	aaatt...450...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
C. Jac	gacctaaa	ccttact	aaatt...457...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
M. Mus	cctccaaa	tctcatt	gaatt...452...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
R. Nor	cctccaaa	tctcact	gaatt...474...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
C. Por	actctgaa	tcttacaga	aatt...550...	tctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
O. Cun	cctctaga	tcttact	aaactg...459...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
C. Fam	cctctaaa	tcttagt	gaatt...482...	gtctacagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
E. Cab	cctctaaa	tcttagt	gaatt...477...	gtctacagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
S. Sus	cctctaaa	tcttagt	gaatt...467...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
L. Afr	tctctaaa	tcttac	ctaatt...469...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
		*	** * *	*** ***** *	*****	*****	*** **	* * *****	**** *

id=38818 gene=ENSG00000120727 name=PAIP2 segment=chr5_138704770_138705387_1 type=E3

H. Sap	gacctaaa	ccttacc	aaatt...447...	cgagagtctgcagcacaact-----	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
R. Mac	gacctaaa	ccttact	aaatt...471...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
P. Tro	gacctaaa	ccttacc	aaatt...455...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
P. Abe	gacctaaa	ccttact	aaatt...450...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
C. Jac	gacctaaa	ccttact	aaatt...457...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
M. Mus	cctccaaa	tctcatt	gaatt...452...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
R. Nor	cctccaaa	tctcact	gaatt...474...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
C. Por	actctgaa	tcttacaga	aatt...550...	tctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
O. Cun	cctctaga	tcttact	aaactg...459...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
C. Fam	cctctaaa	tcttagt	gaatt...482...	gtctacagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
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S. Sus	cctctaaa	tcttagt	gaatt...467...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
L. Afr	tctctaaa	tcttac	ctaatt...469...	gtctgcagcacaacttttct-	TTTAAcaAAGCTAGAACA	GTTTTGGCTT	TTAAAc	cttcatatttgggtagg	taataat
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id=38818 gene=ENSG00000120727 name=PAIP2 segment=chr5_138704770_138705387_1 type=E3 VIEW

Figure 346: CS=7.8



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M.Mus cggTgctggtgagtctgtc...4770...-ggcagctttccaatccatgCTAAcCTGATTAGgtgtctctagggccttgcc...142...gtttggctgtagcgatccgg
R.Nor tggTgctggtgagtctgtc...4770...-ggcagctttccaatccatgCTAAcCTGATTAGgtgtctctagggccttgcc...142...gtttggctgtagcgatccgg
C.Por gggTgcccgtgagtaccacg...4767...-ggcagctttccaatccatgCTAAcCTGATTAGgtatctctagggccttgcc...145...gtttggccacagcaatccgg
O.Cun gggTgcccgtgagtacatgg...4767...-ggcagcctttccaatccatgCTAAcCTGATTAGgtgtctctagggccttgcc...145...gtttggccatagcgatccgg
C.Fam gggTgctggtgagtaccag...4754...-ggcagctttccaatccatgCTAAcCTGATTAGgtgtctctagggccttgcc...158...gtttggccttagcgatccgg
F.Cat gggTgctggtgagtacaag...4745...-ggcagctttccaatccatgCTAAcCTGATTAGgtgtctctagggccttgcc...167...gtttggccttagcgatccgg
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E.Cab gggTgctggtgagtatgca...4767...-ggcagctttccaatccatgCTAAcCTGATTAGgtgtctctagggccttgcc...145...atttggccatagcgatcagg
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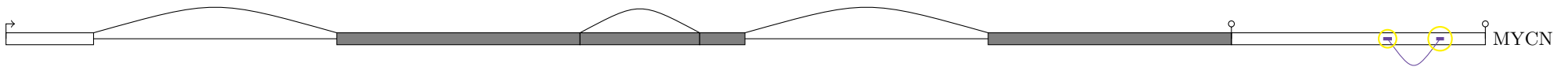
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M.Mus cggTgctggtgagtctgtc...4805...gtctctagggccttgccagCTAATCAGaTTAGgcagcactaatggtagttag-...107...gtttggctgtagcgatccgg
R.Nor tggTgctggtgagtctgtc...4805...gtctctagggccttgccagCTAATCAGaTTAGgcagcactaatggtagttag-...107...gtttggctgtagcgatccgg
C.Por gggTgcccgtgagtaccacg...4802...atctctagggccttgccagCTAATCAGaTTAGgcagcactaatggtagttag-...110...gtttggccacagcaatccgg
O.Cun gggTgcccgtgagtacatgg...4802...gtctctagggccttgccagCTAATCAGaTTAGgcagcactaatggtagttag-...110...gtttggccatagcgatccgg
C.Fam gggTgctggtgagtaccag...4789...gtctctagggccttgccagCTAATCAGaTTAGgcagcactaatggtagttag-...123...gtttggccttagcgatccgg
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S.Sus gggggccggtgagtccacg...4802...gtctctagggccttgccagCTAATCAGaTTAGgcagcactaatggcagttag-...110...gtttggccgtagcgatccgg
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id=674281 gene=ENSG00000162129 name=CLPB segment=chr11_72019649_72028149_-1 type=IN VIEW

Figure 347:



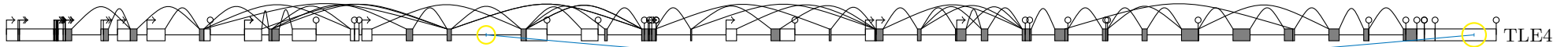
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M.Mus	atgccct	gggaacatttct...268...-agatattactttatcacttt	TTGAAC	taAGAA	acTTTTGT	aaagaaa-tttactatata--	173...gcaattaaatga	tgcaaggc	
R.Nor	atgccct	gggaacatttct...267...-agatattactttatcacttt	TTGAAC	taAGAA	acTTTTGT	aaagaaa-tttactatata--	181...gcaattaaatga	tgcaactc	
O.Cun	ccaccctg	gggaacatttct...270...-atattactttatcacttt	TTGAAC	taAGAA	acTTTTGTA	aaagaaa-tttactatata...	166...gcaattaaatga	tgcaactc	
C.Fam	aaccctg	gggaacatttct...267...-agatattactttatcacttt	TTGAAC	taAGAA	acTTTTGTA	aaagaaa-tttactatata...	163...gcaattaaatga	tgcaactc	
F.Cat	aaccctg	gggaacatttct...266...tagatattactttatcacttt	TTGAAC	taAGAA	acTTTTGTA	aaagaaa-tttactatata...	163...gcaattaaatga	tgcaactc	
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E.Cab	taccctg	gggaacatttct...266...-agatattactttatcacttt	TTGAAC	taAGAA	acTTTTGTA	aaagaaa-tttactatata...	163...gcaattaaatga	tgcaactc	
S.Sus	aaccctg	gggaacatttct...267...-agatattactttatcacttt	TTGAAC	taAGAA	acTTTTGTA	aaagaaa-tttactatata...	163...gcaattaaatga	tgcaactc	
L.Afr	taccctg	gggaacatttct...266...-agatattactttatcacttt	TTGAAC	taAGAA	acTTTTGTA	aaagaaa-tttactatata...	170...gcaattaaatga	tgcaactc	
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id=486292 gene=ENSG00000134323 name=MYCN segment=chr2_16086608_16087129_1 type=E3

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R.Mac	taccctg	gggaacatttct...381...ggtgcatagaactgggtaaa--	TGCAAAGTTCT	gtGTTTAA	-tttcttc-aaaatgtatata-	58...aaaattaaatga	tgcaactc	
P.Tro	taccctg	gggaacatttct...381...ggtgcatagaactgggtaaa--	TGCAAAGTTCT	gtGTTTAA	-tttcttc-aaaatgtatata-	58...aaaattaaatga	tgcaactc	
P.Abe	taccctg	gggaacatttct...381...ggtgcatagaactgggtaaa--	TGCAAAGTTCT	gtGTTTAA	-tttcttc-aaaatgtatata-	58...aaaattaaatga	tgcaactc	
C.Jac	tagccctg	gggaacatttct...382...ggtgcatagaactgggtaaa--	TGCAAAGTTCT	gtGTTTAA	-tttcttc-aaaatgtatata-	54...gcaattaaatga	tgcaactc	
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O.Cun	ccaccctg	gggaacatttct...381...ggtgcatagaactgggtaaa--	TGCAAAGTTCT	gtGTTTAA	-tttcttc-aaaatgtatata-	57...gcaattaaatga	tgcaactc	
C.Fam	aaccctg	gggaacatttct...378...ggtgcatagaactgggtaaa--	TGCAAAGTTCT	gtGTTTAA	-tttcttc-aaaatgtatata-	54...gcaattaaatga	tgcaactc	
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S.Sus	aaccctg	gggaacatttct...378...ggtgcatagaactgggtaaa--	TGCAAAGTTCT	gtGTTTAA	-tttcttc-aaaatgtatata-	54...gcaattaaatga	tgcaactc	
L.Afr	taccctg	gggaacatttct...383...ggtgcatagaactgggtaaa--	TGCAAAGTTCT	gtGTTTAA	-tttcttc-aaaatgtatata-	55...gcaattaaatga	tgcaactc	
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id=486292 gene=ENSG00000134323 name=MYCN segment=chr2_16086608_16087129_1 type=E3 VIEW

Figure 348:



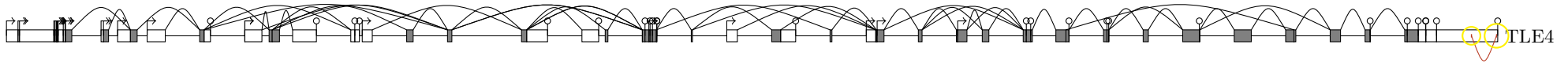
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P.Tro	cccaagag	gtaaggtagttg...4936...	-----aaacaataaattgtattct	GTTTc	TGATct	TCATttatag	caccagca
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R.Nor	cccaagag	gtaagattgttg...4928...	ctaagaagaaaacaataat	TGTATTCTGTTTc	TGATct	TCATttatag	caccagca
C.Por	cccaagag	gtaaggcagttc...4936...	-----gaagacaataaattgtattct	GTTTc	TGATct	TCATttatag	caccagca
O.Cun	cccaagag	gtaaggtagttg...4936...	-----aaacaataaattgtattct	GTTTc	TGATct	TCATttatag	caccagca
C.Fam	cccaagag	gtaaggcagttg...4932...	----ctagaagcaataaattgta	TTCTGTTTc	TGATct	TCATttatag	caccagca
F.Cat	cccaagag	gtaaggcagttg...4932...	----ctagaagcaataaattgta	TTCTGTTTc	TGATct	TCATttatag	caccagca
B.Tau	cccaagag	gtaaggcagttg...4932...	----ccagaacaataaattgta	TTCTGTTTc	TGATct	TCATttatag	caccagca
E.Cab	cccaagag	gtaaggcagttg...4932...	----agtagacacaataaattgta	TTCTGTTTc	TGATct	TCATttatag	caccagca
S.Sus	ctcaagag	gtaagacagttg...4932...	----ctagaacaataaattgta	TTCTGTTTc	TGATct	TCATttatag	caccagca
L.Afr	cccaagag	gtaaggcagttg...4936...	-----aaacaataaattgtattct	GTTTc	TGATct	TCATttatag	caccagca
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id=172631 gene=ENSG00000106829 name=TLE4 segment=chr9_82227634_82242288.1 type=IN

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P.Tro	attgataa	tgaaggtgcggt...876...	tgtacagtgcccttgctgct	ATGGATCAAAAT	caaaagaaccgtgtagatat	-----	...290...	taactctagta	tgcttatt
C.Jac	attgataa	tgaaggtgcggt...908...	tgtacagtgcccttgctgct	ATGGATCAAAAT	caaaagaaccgtgtagatat	-----	...289...	taactctagta	tgcttatt
R.Nor	attgataa	tgaaggtgcatt...876...	tgtacagtgcccttgctgct	ATGGATCAAAAT	caAGAAcTGTTG	--tagataaaactttattgtata	...274...	taactctagaa	tgtttatt
C.Por	attgataa	caaaggtgcggt...880...	tgtacagtgcccttgctgct	ATGGATCAAAAT	caaaagaaccgtgtagataa	-----	...283...	taactctagta	tgcttatt
O.Cun	attgataa	tgaaggtgcggt...878...	tgtacagtgcccttgctgct	ATGGATCAAAAT	caaaagaaccgtgtagataa	-----	...286...	taactctaata	tgcttatt
C.Fam	attgataa	tgaagatgcggt...869...	tgtacagtgcccttgctgct	ATGGATCAAAAT	caAGAGaactgtgtagataaaacttta	-----	...280...	taactctagta	agcttatt
F.Cat	attgataa	tgaagatgcggt...639...	tgtacagtgcccttgctgct	ATGGATCAAAAT	caAGAGaactgtgtagataaaacttta	-----	...285...	taactctagga	cgcttatt
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E.Cab	attgataa	tgaggatgcggt...875...	tgtacagtgcccttgctgct	ATGGATCAAAAT	caAGAGaactgtgtagataaaacttta	-----	...283...	taactctagta	tgcttatt
S.Sus	attgataa	tgaagatgcggt...883...	tgtacagtgcccttgctgct	ATGGATCAAAAT	caAGAGaactgtgtagataaaacttta	-----	...291...	taactctagta	tgcttatt
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id=172701 gene=ENSG00000106829 name=TLE4 segment=chr9_82340415_82341658.1 type=E3 VIEW

Figure 349: CS=8.4



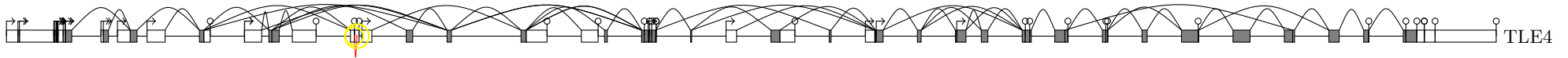
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P.Tro	attgataa	tgaaggtgcgctt...804...at	atgtgacttcttt-----tttta-----	TTATT	-tt	TGTTTgAATGC	TTAAAA	---	atc-ttttaagt-ctgtggatc...	348...	taacttctagta	tgcttatt
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C.Jac	attgataa	tgaaggtgcgctt...836...---	tgtgacttcttt-----ttttatta---	TTATT	-tt	TGTTTgAATGC	TTAAAA	---	atc-ttttaagt-ctgtggatc...	347...	taacttctagta	tgcttatt
M.Mus	attgataa	tgaaggtgcatt...809...---	atgtgactcc-tt-----ttttatta---	TTATT	-tt	TGTTTgAATGC	TTAAAAAG	---	atc-ttttaagt-ctgtggatc...	342...	taacttctagaa	tgattatt
R.Nor	attgataa	tgaaggtgcatt...810...---	ctttttattat-----tatttttt-----			TGTTTgAATGC	TTAAAAAG	---	atc-ttttaagt-ctgtggatc...	343...	taacttctagaa	tgtttatt
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F.Cat	attgataa	tgaagatgcgctt...567...---	tcctttttttt-----ttttatta---	TTATT	-t	TGTTTgAATGC	TTAAAA	---	atc-ttttaagt-ctgtggatc...	349...	taacttctagga	cgcttatt
B.Tau	attggtaa	tgaagatgcgctt...840...---	cgaatgccttaaaaaaatct-----			TTAAGTC	tgTGGAT	---	ctgctgatgtacagtgcctt...	328...	taacttctagta	tgcttatt
E.Cab	attgataa	tgaagatgcgctt...803...---	tgtgactccttt-----ttttatta---	TTATT	-tt	TGTTTgAATGC	TTAAAA	---	atc-ttttaagt-ctgtggatc...	347...	taacttctagta	tgtttatt
S.Sus	attgataa	tgaagatgcgctt...810...---	ctccttt-----ttttaataatttt	TTATT	-tt	TGTTTgAATGC	TTAAAA	---	atc-ttttaagt-ctgtggatc...	355...	taacttctagta	tgcttatt
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P.Abe	attgataa	tgaaggtgcgctt...1173...---	gattgttg-tgcattcagac	TTTTAAGCATTAAACAT-	AAATAA	-----	cttctagta	tgcttatt
C.Jac	attgataa	tgaaggtgcgctt...1209...---	gattgttg-tgcattcagac	TTTTAAGCATTAAACAT-	AAATAA	-----	cttctagta	tgcttatt
M.Mus	attgataa	tgaaggtgcatt...1178...---	agattgttg-tgcattcaga	CTTTAAGCATTAAACAT-	AAATAA	-----	cttctagaa	tgattatt
R.Nor	attgataa	tgaaggtgcatt...1172...---	agattgttg-tgcattcaga	CTTTAAGCATTAAACA	-----	taaataacttctagaa	tgtttatt	
C.Por	attgataa	caaaggtgcgctt...1175...---	gattgttg-tgcattcagac	TTTTAAGCATTAAACA	-----	taaataacttctagta	tgcttatt	
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F.Cat	attgataa	tgaagatgcgctt...941...---	gattgttg-tgcattcagac	TTTTAAGCATTAAACAT	AAAAATAA	-----	cttctagga	cgcttatt
B.Tau	attggtaa	tgaagatgcgctt...1175...---	taagttagattgttg-tgc-----	ATTCAAGCT	ttTAAG	cattaaacataaataacttctagta	tgcttatt	
E.Cab	attgataa	tgaggatgcgctt...1176...---	gattgttg-tgcattcagac	TTTTAAGCATTAAACAT-	AAATAA	-----	cttctagta	tgtttatt
S.Sus	attgataa	tgaagatgcgctt...1192...---	gattgttg-tgcattcagac	TTTTAAGCATTAAACAT-	AAATAA	-----	cttctagta	tgcttatt
L.Afr	attgataa	tgaagacgtgctc...1200...---	attgttcgttcattcagac	TTTTAAGCATTAAACGT-	AAATAA	-----	cttctagta	tgcttatt
	**** **	* * * *	***** * **	** * * * * *		***** *	* ****	

id=172701 gene=ENSG00000106829 name=TLE4 segment=chr9_82340415_82341658.1 type=E3 VIEW

Figure 350:



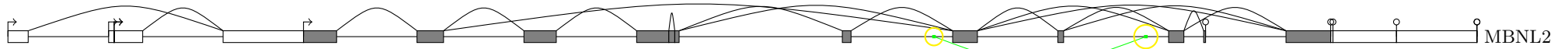
H.Sap	ttgaaaag	tattgcaggttgtaagaagaaattgacttgaagaggccga	CTGCTgc	CCATCATG	gag	caataaaa
R.Mac	ttgaaaag	tattgcaggttgtaagaagaaattgacttgaagaggccga	CTGCTgc	CCATCATG	gag	caataaaa
P.Tro	ttgaaaag	tattgcaggttgtaagaagaaattgacttgaagaggccga	CTGCTgc	CCATCATG	gag	caataaaa
C.Jac	ttgaaaag	tattgcaggttgtaagaagaaattgacttgaagaggccga	CTGCTgc	CCATCATG	gag	caataaaa
M.Mus	ttgaaaag	tattgcaggttgtaagaagaaattgacttgaagaggccga	CTGCTgc	CCATCATG	gag	caataaaa
R.Nor	ttgaaaag	tattgcaggttgtaagaagaaattgacttgaagaggccga	CTGCTgc	CCATCATG	gag	caataaaa
C.Por	ttgaaaag	tattgcaggttgtaagaagaaattgacttgaagaggccga	CTGCTgc	CCATCATG	gag	caataaaa
O.Cun	ttgaaaag	tattgcaggttgtaagaagaaattgacttgaagaggccga	CTGCTgc	CCATCATG	gag	caataaaa
C.Fam	ttgaaaag	tattgcaggttgtaagaagaaattgacttgaagaggccga	CTGCTgc	CCATCATG	gag	caataaaa
F.Cat	ttgaaaag	tattgcaggttgtaagaagaaattgacttgaagaggccga	CTGCTgc	CCATCATG	gag	caataaaa
B.Tau	ttgaaaag	tattgcaggttgtaagaagaaattgacttgaagaggccga	CTGCTgc	CCATCATG	gag	caataaaa
E.Cab	ttgaaaag	tattgcaggttgtaagaagaaattgacttgaagaggccga	CTGCTgc	CCATCATG	gag	caataaaa
O.Avi	ttgaaaag	tattgcaggttgtaagaagaaattgacttgaagaggccga	CTGCTgc	CCATCATG	gag	caataaaa
L.Afr	ttgaaaag	tattgcaggttgtaagaagaaattgacttgaagaggccga	CTGCTgc	CCATCATG	gag	caataaaa
	*****	*****	*****	*****	*****	*****

id=172623 gene=ENSG00000106829 name=TLE4 segment=chr9_82194975_82195033_1 type=AN

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R.Mac	tcatggag	caaataaagcaaaactgccgaag	CATGGTGGAGCAG	cgagacggg	ccctcagcaattt	gttgctatt	aatttacc
P.Tro	tcatggag	caaataaagcaaaactgccgaag	CATGGTGGAGCAG	cgagacggg	ccctcagcaattt	gttgctatt	aatttacc
C.Jac	tcatggag	caaataaagcaaaactgccgaag	CATGGTGGAGCAG	cgagacggg	ccctcagcaattt	gttgctatt	aatttacc
M.Mus	tcatggag	caaataaagcaaaactgccgaag	CATGGTGGAGCAG	cgagacggg	ccctcagcaattt	gttgctatt	aatttacc
R.Nor	tcatggag	caaataaagcaaaactgccgaag	CATGGTGGAGCAG	cgagacggg	ccctcagcaattt	gttgctatt	aatttacc
C.Por	tcatggag	caaataaagcaaaactgccgaag	CATGGTGGAGCAG	cgagacggg	ccctcagcaattt	gttgctatt	aatttacc
O.Cun	tcatggag	caaataaagcaaaactgccgaag	CATGGTGGAGCAG	cgagacggg	ccctcagcaattt	gttgctatt	aatttacc
C.Fam	tcatggag	caaataaagcaaaactgccgaag	CATGGTGGAGCAG	cgagacggg	ccctcagcaattt	gttgctatt	aatttacc
F.Cat	tcatggag	caaataaagcaaaactgccgaag	CATGGTGGAGCAG	cgagacggg	ccctcagcaattt	gttgctatt	aatttacc
B.Tau	tcatggag	caaataaagcaaaactgccgaag	CATGGTGGAGCAG	cgagacggg	ccctcagcaattt	gttgctatt	aatttacc
E.Cab	tcatggag	caaataaagcaaaactgccgaag	CATGGTGGAGCAG	cgagacggg	ccctcagcaattt	gttgctatt	aatttacc
O.Avi	tcatggag	caaataaagcaaaactgccgaag	CATGGTGGAGCAG	cgagacggg	ccctcagcaattt	gttgctatt	aatttacc
L.Afr	tcatggag	caaataaagcaaaactgccgaag	CATGGTGGAGCAG	cgagacggg	ccctcagcaattt	gttgctatt	aatttacc
	*****	*****	*****	*****	*****	*****	*****

id=172624 gene=ENSG00000106829 name=TLE4 segment=chr9_82195034_82195100_1 type=AN VIEW

Figure 351:



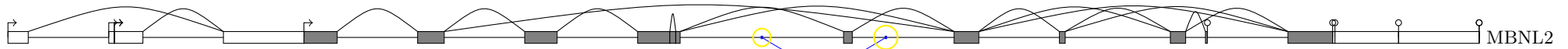
H. Sap	tagacctg	gtactttgacct...465...----	cattcgacattg-ccgctggtTAAA-tTAAGGtGCATGGcAGAGG	catctccttagctgtcattt...80...cttcatttctag	gcctttcc
R. Mac	tagacctg	gtactttgacct...466...----	cattcgacattg-ccgctggtTAAA-tTAAGGtGCATGGcAGAGG	catctccttagctgtcattt...80...cttcatttctag	gcctttcc
P. Tro	tagacctg	gtactttgacct...465...----	cattcgacattg-ccgctggtTAAA-tTAAGGtGCATGGcAGAGG	catctccttagctgtcattt...80...cttcatttctag	gcctttcc
P. Abe	tagacctg	gtactttgacct...465...----	cattcgacattg-ccgctggtTAAA-tTAAGGtGCATGGcAGAGG	catctccttagctgtcattt...80...cttcatttctag	gcctttcc
C. Jac	tagacctg	gtactttgacct...465...----	cattcgacattg-ccgctggtTAAA-tTAAGGtGCATGGcAGAGG	catctccttagctgtcattt...80...cttcatttctag	gcctttcc
M. Mus	tagacctg	gtactttgacct...489...----	cattcgacattg-ccgctggtTAAA-tTAAGGtGCATGGcAGAGG	catctccttagctgtcattt...109...cttcgctttcag	gcctttcc
R. Nor	tagacctg	gtactttgacct...471...----	cattcaacattg-ccgctggtTAAA-tTAAGGtGCATGGcAGAGG	catctccttagctgtcgttt...101...cttccttgacag	gcctttcc
S. Por	tagacctg	gtactttgacct...458...cactcattcaacattg-cgc	TGGTTAAA-GTAAGGtGCATGGcAGAGG	catctccttagctgtcattt...101...cttccttgacag	gcctttcc
O. Cun	tagacctg	gtactttgacct...460...----	cattcgacattg-ccgctggtTAAA-tTAAGGtGCATGGcAGAGG	catctccttagctgtcattt...80...cttcatttctag	gcctttcc
C. Fam	tagacctg	gtactttgacct...491...----	attcgacattgcccgcctctTAAA-tTAAGGtGCATGGcAGAGG	catctccttagctgtcattt...79...tctttattatag	gcctttcc
F. Cat	tagacctg	gtactttgacct...513...----	cattcgacattg-ccgctggtTAAA-tTAAGGtGCATGGcAGAGG	catctccttagctgtcattt...80...cttcctcatag	gcctttcc
B. Tau	tagacctg	gtactttgacct...473...----	cattcgacattg-ccgctggtTAAA-tTAAGGtGCATGGcAGAGG	catctccttagctgtcattt...80...cttcatttctag	gcctttcc
E. Cab	tagacctg	gtactttgacct...461...----	cattcgacattg-ccgctggtTAAA-tTAAGGtGCATGGcAGAGG	catctccttagctgtcattt...80...cttccttctag	gcctttcc
S. Sus	tagacctg	gtactttgacct...464...----	cattcgacattg-ccgctggtTAAA-tTAAGGtGCATGGcAGAGG	catctccttagctgtcgttt...81...cttcacttacag	gcctttcc
L. Afr	tagacctg	gtactttgacct...461...----	cattttacgttg-ccgctggtTAAA-tTAAGGtGCATGGcAGAGG	catctccttagctgtcattt...80...cttcactgtag	gcctttcc
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id=346343 gene=ENSG0000139793 name=MBNL2 segment=chr13.98009104.98009735.1 type=IN

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R. Mac	cagtattg	gtaggtttcaac...1095...-gctat	tttcccttttttattTCTCTcCCATGcctCCTTGcTTTG	cattgtgattgcatgccatc-----	...105...ccctcctgaaag	taccatg
P. Tro	cagtattg	gtaggtttcaac...1095...-gctat	tttcccttttttattTCTCTcCCATGcctCCTTGcTTTG	cattgtgattgcatgccatc-----	...105...ccctcctgaaag	taccatg
P. Abe	cagtattg	gtaggtttcaac...1093...-gctat	tttcccttttttattTCTCTcCCATGcctCCTTGcTTTG	cattgtgattgcatgccatc-----	...105...ccctcctgaaag	taccatg
C. Jac	cagtattg	gtaggtttcaac...1089...-gctat	tttcccttttttattTCTCTcCCATGcctCCTTGcTTTG	cattgtgattgcatgccatc-----	...105...ccctcctgaaag	taccatg
M. Mus	cagtattg	gtaggtttcaac...1075...agctat	tttccc-tttttattTCTCTcCCATGcctCCTTGcTTTG	cactgtgatcgcatgccatc-----	...103...ccctcctgaaag	taccatg
R. Nor	cagtattg	gtaggtttcaac...1090...agctat	tttccc-tttttattTCTCTcCCATGcctCCTTGcTTTG	cactgtggtcgcatgccatc-----	...103...ccctcctgaaag	taccatg
C. Por	cagtattg	gtaggtttcaac...1031...-gctat	tttcccttttttattTCTCTcCCATGcctCCTTGcTTTG	tgattgcatgccatcctgctg...100...ccctcctgaaag	taccatg	
O. Cun	cagtattg	gtaggtttcaac...1100...-gctat	tttcccttttttattTCTCTcCCATGcctCCTTGcTTTG	cattgtgattgcatgccatc-----	...105...ccctcctgaaag	taccatg
C. Fam	cagtattg	gtaggtttcaac...1078...-gctat	tttcccttttttattTCTCTcCCATGcctCCTTGcTTTG	cattgtgattgcatgccatc-----	...105...ccctcctgaaag	taccatg
F. Cat	cagtattg	gtaggtttcaac...1100...-gctat	tttcccttttttattTCTCTcCCATGcctCCTTGcTTTG	cattgtgattgcatgccatc-----	...105...ccctcctgaaag	taccatg
B. Tau	cagtattg	gtaggtttcaac...1120...-gctat	tttcccttttttattTCTCTcCCATGcctCCTTGcTTTG	cattgtgattgcatgccatc-----	...105...ccctcctgaaag	taccatg
E. Cab	cagtattg	gtaggtttcaac...1096...-gctat	tttcccttttttattTCTCTcCCATGcctCCTTGcTTTG	cattgtgattgcatgccatc-----	...105...ccctcctgaaag	taccatg
S. Sus	cagtattg	gtaggtttcaac...1078...-gctat	tttcccttttttattTCTCTcCCATGcctCCTTGcTTTG	cattgtgattgcatgccatc-----	...103...ccctcctgaaag	taccatg
L. Afr	cagtattg	gtaggtttcaac...1058...-gctat	tttcccttttttattTCTCTcCCATGcctCCTTGcTTTG	cattgtgattgcatgccatc-----	...103...ccctcctgaaag	taccatg
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id=346347 gene=ENSG0000139793 name=MBNL2 segment=chr13.98017426.98018712.1 type=IN VIEW

Figure 352:



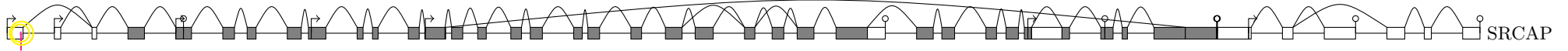
H. Sap	cagtc	catg	gtaagtgcggcc...4748...tacta--at	tttaaggtgtaata--TTCA	TTCTTT	GAGAA	cattttt	gtt	gttg	-tgc	atg	----	...160...	tg	tatt	aaa	ag	actcagtc	
R. Mac	cagtc	catg	gtaagtgcggcc...4748...tacta--at	tttaaggtgtaata--TTCA	TTCTTT	GAGAA	cattttt	gtt	gttg	-tgc	atg	----	...160...	tg	tatt	aaa	ag	actcagtc	
P. Tro	cagtc	catg	gtaagtgcggcc...4748...tacta--at	tttaaggtgtaata--TTCA	TTCTTT	GAGAA	cattttt	gtt	gttg	-tgc	atg	----	...160...	tg	tatt	aaa	ag	actcagtc	
P. Abe	cagtc	catg	gtaagtgcggcc...4748...tacta--at	tttaaggtgtaata--TTCA	TTCTTT	GAGAA	cattttt	gtt	gttg	-tgc	atg	----	...160...	tg	tatt	aaa	ag	actcagtc	
C. Jac	cagtc	catg	gtaagtgcggcc...4748...tacta--at	tttaaggtgtaata--TTCA	TTCTTT	GAGAA	cattttt	gtt	gttg	-tgc	atg	----	...160...	tg	tatt	aaa	ag	actcagtc	
M. Mus	cagtc	catg	gtaagtgcggcc...4748...tacta--at	tttaaggtgtaata--TTCA	TTCTTT	GAGAA	cattttt	gtt	gttg	-tgc	atg	----	...160...	tg	tatt	aaa	ag	actcagtc	
R. Nor	cagtc	catg	gtaagtgcggcc...4678...ttcaaacatctatattttac	TCTCT	ta	TATGCTTTTAAc	TAAG	---	gtacag	tagatg	cattttt	...	224...	tg	tatt	aaa	ag	actcagtc	
C. Por	cagtc	catg	gtaagtgcggcc...4748...tacta--at	tttaaggtgtaata--TTCA	TTCTTT	GAGAA	cattttt	gtt	gttg	-tgc	atg	----	...160...	tg	tatt	aaa	ag	actcagtc	
O. Cun	cagtc	catg	gtaagtgcggcc...4748...tacta--at	tttaaggtgtaata--TTCA	TTCTTT	GAGAA	cattttt	gtt	gttg	-tgc	atg	----	...160...	tg	tatt	aaa	ag	actcagtc	
C. Fam	cagtc	catg	gtaagtgcggcc...4679...ttcaaacatctatattttac	TCTCT	ta	TATGCTTTTAAc	TAAG	---	tatag	tagatg	cattttt	gc...	222...	tg	tatt	aaa	ag	actcagtc	
F. Cat	cagtc	catg	gtaagtgcggcc...4748...tacta--at	tttaaggtgtaata--TTCA	TTCTTT	GAGAA	cattttt	gtt	gttg	-tgc	atg	----	...160...	tg	tatt	aaa	ag	actcagtc	
B. Tau	cagtc	catg	gtaagtgcggcc...4748...tacta--at	tttaaggtgtaata--TTCA	TTCTTT	GAGAA	cattttt	gtt	gttg	-tgc	atg	----	...160...	tg	tatt	aaa	ag	actcagtc	
E. Cab	cagtc	catg	gtaagtgcggcc...4748...tacta--at	tttaaggtgtaata--TTCA	TTCTTT	GAGAA	cattttt	gtt	gttg	-tgc	atg	----	...160...	tg	tatt	aaa	ag	actcagtc	
S. Sus	cagtc	catg	gtaagtgcggcc...4679...ttcaaacatctatattttac	TCTCT	ta	TATGCTTTTAA	---	ctaag	gatag	tagatg	cat	----	...228...	tg	tatt	aaa	ag	actcagtc	
L. Afr	cagtc	catg	gtaagtgcggcc...4748...tacta--at	tttaaggtgtaata--TTCA	TTCTTT	GAGAA	cattttt	gtt	gttg	-tgc	acg	----	...160...	tg	tatt	aaa	ag	actcagtc	
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id=346341 gene=ENSG00000139793 name=MBNL2 segment=chr13.97999322.98009049.1 type=IN

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R. Mac	tagacctg	gtactttgacct...160...-tccta	acaaat	tttaataacc-TTTTC	ca	AAAGAGTGAA	-----	gcaaat	ttaaat	tatttgac	----	...392...	ctc	catt	ctag	gcctttcc	
P. Tro	tagacctg	gtactttgacct...160...-tccta	acaaat	tttaataacc-TTTTC	ca	AAAGAGTGAA	-----	gcaaat	ttaaat	tatttgac	----	...391...	ctc	catt	ctag	gcctttcc	
P. Abe	tagacctg	gtactttgacct...160...-tccta	acaaat	tttaataacc-TTTTC	ca	AAAGAGTGAA	-----	gcaaat	ttaaat	tatttgac	----	...391...	ctc	catt	ctag	gcctttcc	
C. Jac	tagacctg	gtactttgacct...161...-tccta	acaaat	tttaataacc-TTTTC	ca	AAAGAGTGAA	-----	gcaaat	ttaaat	tatttgac	----	...390...	ctc	catt	ctag	gcctttcc	
M. Mus	tagacctg	gtactttgacct...161...-tcta	acaaat	tttaataacc-TTTTC	ca	AAAGAGTGAA	-----	gcaaat	ttaaat	tatttgac	----	...444...	ctc	gc	ctttcag	gcctttcc	
R. Nor	tagacctg	gtactttgacct...469...-ctcatt	caacattg-cgctg-	TTTAaa	TTAAGGtGCATGgc	AGAGG	catctcc	---	ttagct	gtcgttt	...	101...	ctt	ccctg	cag	gcctttcc	
C. Por	tagacctg	gtactttgacct...160...-tccta	acaaat	tttaataacc-TTTTC	ca	AAAGAGTGAA	-----	gcaaat	ttaaat	tatttgac	----	...409...	ctt	ccctg	cag	gcctttcc	
O. Cun	tagacctg	gtactttgacct...156...-tccta	acaaat	tttaataacc-TTTTC	ca	AAAGAGTGAA	-----	gcaaat	ttaaat	tatttgac	----	...390...	ctt	catt	ctag	gcctttcc	
C. Fam	tagacctg	gtactttgacct...488...-ctcatt	cgacattgcccgtc-	CTTTAaa	TTAAGGtGCATGgc	AGAGG	catctcc	---	ttagct	gtcatt	...	79...	ctt	tatt	atag	gcctttcc	
F. Cat	tagacctg	gtactttgacct...156...-tccta	acaaat	tttaataacc-TTTTC	ca	AAAGAGTGAA	-----	gcaaat	ttaaat	tatttgac	----	...443...	ctt	ccct	catag	gcctttcc	
B. Tau	tagacctg	gtactttgacct...155...-tccta	acaaat	tttaataacc-TTTTC	ca	AAAGAGTGAA	-----	gcaaat	ttaaat	tatttgac	----	...404...	ctt	cact	ctag	gcctttcc	
E. Cab	tagacctg	gtactttgacct...159...-ttcta	acaaat	tttaataacc-TTTTC	ca	AAAGAGTGAA	-----	gcaaat	ttaaat	tatttgac	----	...388...	ctt	ccct	ctag	gcctttcc	
S. Sus	tagacctg	gtactttgacct...469...-gacatt	g-cgctgtttaa	TTAAGGtGCATGgc	AGAGG	catctcc	---	ttagct	gtcgttt	...	81...	ctt	cact	acag	gcctttcc		
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id=346343 gene=ENSG00000139793 name=MBNL2 segment=chr13.98009104.98009735.1 type=IN VIEW

Figure 353:



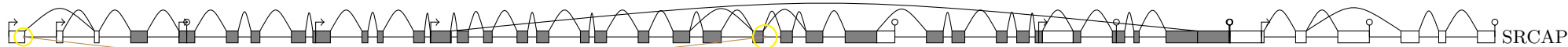
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R. Mac	tggtggtg	gcggccgagacg...165...aaggcgggtggccaagagggg	GCCCtc	CCCC	TCCT	cggcgggagggggggtggtg	cgcacgccccgaggacgcag	gtaaggag
P. Abe	tggtggtg	gcggccgagacg...168...aaggcgggtggccaagagggg	GCCCtc	CCCC	TCCT	cggcgggagggggggtggtg	cgcacgccccgaggacgcag	gtaaggag
C. Jac	tggtggtg	gcggccgagacg...164...aaggcgggtggccaagagggg	GCCCtc	CCCC	TCCT	cggcgggagggggggtggtg	cgcacgccccgaggacgcag	gtaaggag
M. Mus	tggcgggtg	gcggccgagacg...171...aaggcggcgaccaagagggg	GCCCtc	CCCC	TCCT	cggcgggagggggggtggtg	gagcacgccccgaggacgcag	gtaaggag
R. Nor	tggcgggtg	gcggccgagacg...168...aaggcgggtgaccaagagggg	GCCCtc	CCCC	TCCT	cggcgggagggggggtggtg	gagcacgccccgaggacgcag	gtaaggag
C. Por	tggtggtg	gcggccgagacg...165...aagtctgcggccaagagggg	GCCCtc	CCCC	TCCT	cggcgggagggggggtggtg	cgcacgccccgaggacgcag	gtaaggag
O. Cun	tggtggtg	gcggccgagacg...166...aaggcggcctggccaagagggg	GCCCtc	CCCC	TCCT	cggcgggagggggggtggtg	cgcacgccccgaggacgcag	gtaaggag
C. Fam	tggtggtg	gcggccgagacg...165...aaggcggcggccaagagggg	GCCCtc	CCCC	TCCT	cggcgggagggggggtggtg	cgcacgccccgaggacgcag	gtaaggag
F. Cat	tggtggtg	gcggccgagacg...165...aaggcggcggccaagagggg	GCCCtc	CCCC	TCCT	cggcgggagggggggtggtg	cgcacgccccgaggacgcag	gtaaggag
B. Tau	tggtggtg	gcggccgagacg...165...aaggcggcggccaagagggg	GCCCtc	CCCC	TCCT	cggcgggagggggggtggtg	cgcacgccccgaggacgcag	gtaaggag
L. Afr	tggcgggtg	gcggccgagacg...165...aaagcagcggccaagagggg	GCCCtc	CCCC	TCCT	gtcgggagggggggtggtg	tcgacgccccgaggacgcag	gtaaggag
	*** **	*****	** *	*	*****	*****	*****	*****

id=397134 gene=ENSG0000080603 name=SRCAP segment=chr16_30709530_30709782_1 type=E5

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R. Mac	tggtggtg	gcggccgagacg...184...agccctccccctcctcggc	GGGAGGGGGGT	ggtg	cgacgccccgaggacgcag	gtaaggag
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R. Nor	tggcgggtg	gcggccgagacg...187...ggccctccccctcctcggc	GGGAGGGGGGT	ggtg	gacgccccgaggacgcag	gtaaggag
C. Por	tggtggtg	gcggccgagacg...184...ggccctccccctcctcggc	GGGAGGGGGGT	ggtg	cgacgccccgaggacgcag	gtaaggag
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C. Fam	tggtggtg	gcggccgagacg...184...ggccctccccctcctcggc	GGGAGGGGGGT	ggtg	cgacgccccgaggacgcag	gtaaggag
F. Cat	tggtggtg	gcggccgagacg...184...ggccctccccctcctcggc	GGGAGGGGGGT	ggtg	cgacgccccgaggacgcag	gtaaggag
B. Tau	tggtggtg	gcggccgagacg...184...ggccctccccctcctcggc	GGGAGGGGGGT	ggtg	cgacgccccgaggacgcag	gtaaggag
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Figure 354: CS=7.2



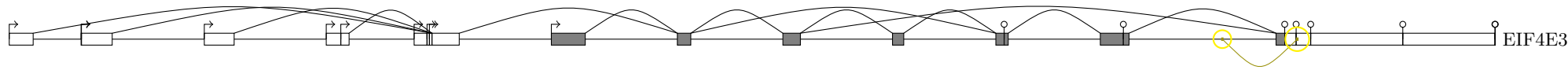
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C.Jac	tggtggtg	gcggccgagacg...180...-gggggccccccccctcctc	GGCGGGAGGGG	GGTGG	tgccacgccccgaggacgcag	gtaaggag
M.Mus	tggtggtg	gcggccgagacg...187...-gggggccccccccctcctc	GGCGGGAGGGG	GGTGG	tgccacgccccgaggacgcag	gtaaggag
R.Nor	tggtggtg	gcggccgagacg...184...-gggggccccccccctcctc	GGCGGGAGGGG	GGTGG	tgccacgccccgaggacgcag	gtaaggag
C.Por	tggtggtg	gcggccgagacg...181...-gggggccccccccctcctc	GGCGGGAGGGG	GGTGG	tgccacgccccgaggacgcag	gtaaggag
O.Cun	tggtggtg	gcggccgagacg...182...-gggggccccccccctcctc	GGCGGGAGGGG	GGTGG	tgccacgccccgaggacgcag	gtaaggag
C.Fam	tggtggtg	gcggccgagacg...181...-gggggccccccccctcctc	GGCGGGAGGGG	GGTGG	tgccacgccccgaggacgcag	gtaaggag
F.Cat	tggtggtg	gcggccgagacg...181...-gggggccccccccctcctc	GGCGGGAGGGG	GGTGG	tgccacgccccgaggacgcag	gtaaggag
B.Tau	tggtggtg	gcggccgagacg...181...-gggggccccccccctcctc	GGCGGGAGGGG	GGTGG	tgccacgccccgaggacgcag	gtaaggag
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R.Mac	gctgcaaa	gtaggtaaaac	CCACCCCTg	TCCTGCCT	tttttctcctcttcctgt-...216...cccttaaccag	ggaatgtg
P.Abe	gctgcaaa	gtaggtaaaac	CCACCCCTg	TCCTGCCT	tttttctcctcttcctgt-...217...cccttaaccag	ggaatgtg
C.Jac	gctgcaaa	gtaggtaaaac	CCACCCCTg	TCCTGCCT	tttttctcctcttcctgt-...215...cccttaaccag	ggaatgtg
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Figure 355: CS=3.6



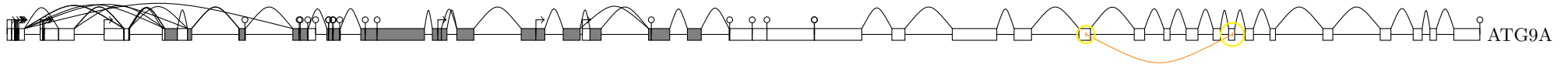
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P. Tro	ttataaac	gtgagtgcctca...4942...-cttttttctttttgttt	TTTTCTgTCCTTAG	cccatgaa
P. Abe	ttataaac	gtaagtgcctca...4942...-cttttttctttttgttt	TTTTCTgTCCTTAG	cccatgaa
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O. Cun	ttataaac	gtaagtgcctca...4774...ccttttttctttttgttt	TTTTCTgTCCTTAG	cccatgaa
C. Fam	ttataaac	gtaagtctttat...4312...ccttttttctttttgttt	TTTTCTgTCCTTAG	cccatgaa
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R. Mac	aacactaa	ttg--cactctgtaaagaattccttctgctttgctgattggttttgaaacggtc	TTAAcAGGA	gGGAGAGt
P. Tro	aacactaa	ttg--cactctgtaaagaattccttctgctttgctgattggttttgaaacggtc	TTAAcAGGA	gGGAGAGt
P. Abe	aacactaa	ttg--cactctgtaaagaattccttctgctttgctgattggttttgaaacggtc	TTAAcAGGA	gGGAGAGt
C. Jac	aacactaa	ttg--cactctgtaaagaattccttctgctttgctgattggttttgaaacggtc	TTAAcAGGA	gGGAGAGt
M. Mus	aacactaa	ttg--cactctgtaaagaattccttctgctttgctgattggttttgaaacggtc	TTAAcAGGA	gGGAGAGt
R. Nor	aacactaa	ttg--cactctgtaaagaattccttctgctttgctgattggttttgaaacggtc	TTAAcAGGA	gGGAGAGt
C. Por	aacactaa	ttg--cactctgtaaagaattccttctgctttgctgattggttttgaaacggtc	TTAAcAGGA	gGGAGAGt
O. Cun	aacactaa	ttg--cactctgtaaagaattccttctgctttgctgattggttttgaaacggtc	TTAAcAGGA	gGGAGAGt
C. Fam	aacactaa	ttgcacactctgtaaagaattccttctgctttgctgattggttttgaaacggtc	TTAAcAGGA	gGGAGAGt
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E. Cab	aacactaa	ttg--cactctgtaaagaattccttctgctttgctgattgattttgaaacggtc	TTAAcAGGA	gGGAGAGt
S. Sus	aacactaa	ttg--cactctgtaaagaattccttctgctttgctgattggttttgaaacggtc	TTAAcAGGA	gGGAGAGt
L. Afr	aacactaa	ttg--cactctgtacagaattccttctgctttgctgattggttttgaaacggtc	TTAAcAGGA	gGGAGAGt
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Figure 356: CS=4.2



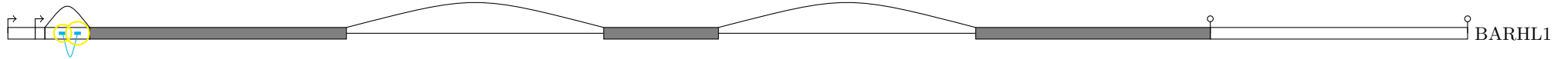
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E. Cab	cctcctag	ctacctggtgtt...29...tcattggcatcatctacttc	AGCATGTTCTTCA	acgcctggtttggcctcattgtgttcctgtgcatgagtc	ctttacctcg	gtgagtg
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L. Afr	cctcctag	ctacctggtgtt...29...tcattggcatcatctacttc	AGCATGTTCTTCA	atgcctggtttggcctcattgtgttcctgtgcatgagtc	ctttacctca	gtgagtg
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P. Tro	ttttgcag	gatgatccagaccaacttcattgaca	TGGAGAACATGTT	tgacttgctgaaagaggagacagaa	gtgagcga
P. Abe	ttatgcag	gatgatccagaccaacttcattgaca	TGGAGAACATGTT	cgacttgctgaaagaggagacagaa	gtgagcga
C. Jac	tcttgcag	gatgatccagaccaacttcattgaca	TGGAGAACATGTT	tgacttgctgaaagaggagacagaa	gtgagcga
M. Mus	tcttgcag	gatgatccagactaacttcattgaca	TGGAGAACATGTT	tgacttgctgaaagaggagacagaa	gtgagcga
R. Nor	tcttgcag	aatgatccagactaacttcattgaca	TGGAGAACATGTT	tgacttgctgaaagaggagacagaa	gtgagcga
O. Cun	tcttgcag	gatgatccagaccaacttcattgaca	TGGAGAACATGTT	cgacttgctgaaagaggagacagaa	gtgagcga
C. Fam	tcttgcag	gatgatccagaccaacttcattgaca	TGGAGAACATGTT	tgacttgctgaaagaggagacagaa	gtgagcga
F. Cat	ttttgcag	gatgatccagaccaacttcattgaca	TGGAGAACATGTT	cgacttgctgaaagaggagacagaa	gtgagcga
B. Tau	tcttgcag	gatgatccagaccaacttcattgaca	TGGAGAACATGTT	tgacttgctgaaagaggagacagaa	gtgagcga
E. Cab	tcttgcag	gatgatccagaccaacttcattgaca	TGGAGAACATGTT	tgacttgctgaaagaggagacagaa	gtgagcga
S. Sus	tcttgcag	gatgatccagaccaacttcattgaca	TGGAGAACATGTT	cgacttgctgaaagaggagacagaa	gtgagcga
L. Afr	tctcctag	gatgatccagaccaacttcattgaca	TGGAGAACATGTT	tgacttgctgaaagaggagacagaa	gtgagcga
	*	***	***** ***** ***** ***** ***** ** ***** ***** ***** ***** ** **		** **

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Figure 357:



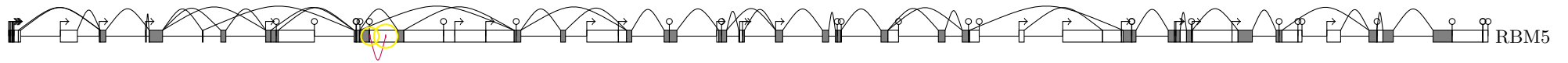
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R. Nor	catccaag	gtgcccaca-ggctccctgc	CCGCct	TCCCca	TGCCag	-cccgcagctaggggcaggggcagcggcggctggggtt-ggggggtgggtggg	gagctttt
C. Por	cgtccaag	gtgcccgc-AGGCTCCCTGCCCGCTTCCCATGCC				-cccgcagctaggggcaggggcagcggcggctggggtt-ggggggtgggtggg	gagctttt
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O. Avi	catccaag	gtgcccgca-ggctccctgc	CCGCct	TCCCca	TGCCag	-cccgcagctaggggcaggggcagcggcggctggggtt-ggggggtgggtggg	gagctttt
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F. Cat	cgtccaag	gtgcccgcagggctccctgcccgccttccccatgccagcccgcagctagg-----	GGCAG	-----	GGGcaGCGG	tggctggggttgggggtggggtggg	gagctttt
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S. Sus	cgtccaag	gtgcccgca-ggctccctgcccgccttccccatgccag-cccgcagctagg-----	GGCAG	-----	GGGcaGCGG	cggctggggttgggggt-ggggtggg	gagctttt
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Figure 358:



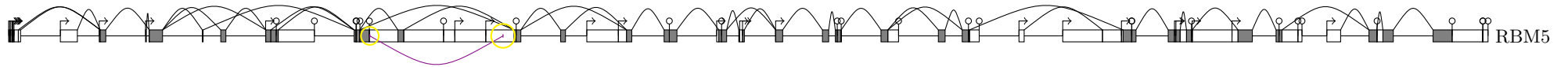
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R.Mac	tTTGCCAT	GGCtAAGGAATG	--tgact--ctttgaaaacatgt--...314...	tgctgtctctag	gtgtaagc
P.Tro	tTTGCCAT	GGCtAAGGAATG	--tgact--ctttgaaaacatgt--...320...	tgctgtctctag	gtgtaagc
P.Abe	tTTGCCAT	GGCtAAGGAATG	--tgact--ctttgaaaacatgt--...343...	tgctgtctctag	gtgtaagc
C.Jac	tTTGCCAT	GGCtAAGGAATG	--tgact--cttagaaaacatgt--...327...	tgctgtctctag	gtgtaagc
M.Mus	tTTGCCAT	GGCtAAGGAATA	--tgaatgactttgaaaacgat----...305...	tgctgtctctag	gtgtaagc
R.Nor	tTTGCCAT	GGCtAAGGAATA	--tgaatgactttgaaaacgat----...317...	tgctgtctctag	gtgtaagc
O.Por	tTTGCCAT	GGCtAAGGAATG	tgtagaca--ctttgaaaacaat----...316...	tgctgtctctag	gtgtaagc
C.Cun	tTTGCCAT	GGCtAAGGAATG	-----tgactttgaaaacgatgta...313...	tgctgtctctag	gtgtaagc
C.Fam	tTTGCCAT	GGCtAAGGAAT	--gtgact--ctttgaaaacgata----...322...	tgctgtctctag	gtgtaagc
F.Cat	tTTGCCAT	GGaTAAGGAAT	--gtgact--ccttgaaaacgat----...329...	tgctgtctctag	gtgtaagc
B.Tau	tTTGCCAT	GGCtAAGGAAT	--gtgact--ccttgaaaacgatg---...317...	tgctgtctctag	gtgtaagc
E.Cab	tTTGCCAT	GGCtAAGGAAT	--gtgact--ccttgaaaacgatg---...322...	tgctgtctctag	gtgtaagc
S.Sus	tTTGCCAT	GGCtAAGGAAT	--gtgact--ccttgaaaacgatg---...323...	tgctgtctctag	gtgtaagc
L.Afr	tTTGCCAT	GGCtAAGGAAT	--gtgact--ccttgaaaacgatg---...326...	tgctgtctctag	gtgtaagc
*****	** *****	*** *****	*****	*****	*****

id=738484 gene=ENSG0000003756 name=RBM5 segment=chr3_50137606_50137964.1 type=AN

H.Sap	tttgccat	ggctaaggaatg...155...	-ggcatttagttc-aggcggct-	TGTTCCCTTGCCATGG	-CAAA	gatatcaagaagatcccccaag...121...	tgctgtctctag	gtgtaagc
R.Mac	tttgccat	ggctaaggaatg...154...	-ggcatttagttc-aggcggct-	TGTTCCCTTGCCATGG	-CAAA	gatatcaagaagatcccccaag...121...	tgctgtctctag	gtgtaagc
P.Tro	tttgccat	ggctaaggaatg...160...	-ggcatttagttc-aggcggct-	TGTTCCCTTGCCATGG	-CAAA	gatatcaagaagatcccccaag...121...	tgctgtctctag	gtgtaagc
P.Abe	tttgccat	ggctaaggaatg...174...	-gcatttagttcaaggcggct-	TGTTCCCTTGCCATGG	-CAAA	gatatcaagaagatcccccaag...129...	tgctgtctctag	gtgtaagc
C.Jac	tttgccat	ggctaaggaatg...167...	-ggcgtttagttc-aggcggct-	TGTTCCCTTGCCATGG	-CAAA	gatatcaagaagatcccccaag...121...	tgctgtctctag	gtgtaagc
M.Mus	tttgccat	ggctaaggaata...145...	-tggcatttaattc-aggtggc-	TGTTCCCTTGCCATGG	-CAAA	gatatcaagaagatcccccaag...121...	tgctgtctctag	gtgtaagc
R.Nor	tttgccat	ggctaaggaata...157...	-tggcatttaattc-aggtggc-	TGTTCCCTTGCCATGG	-CAAA	gatatcaagaagatcccccaag...121...	tgctgtctctag	gtgtaagc
C.Por	tttgccat	ggctaaggaatg...156...	-ggcatttagttg-aggcggct-	TGTTCCCTTGCCATGG	-CAAA	gtagtcaagaagatcccccaag...121...	tgctgtctctag	gtgtaagc
O.Cun	tttgccat	ggctaaggaatg...153...	-gacatttagttc-agacggct-	TGTTCCCTTGCCATGG	-CAAA	gatatcaagaagatcccccaag...121...	tgctgtctctag	gtgtaagc
C.Fam	tttgccat	ggctaaggaatg...162...	---cacttagttc-aggcggcttg	GTTCCCTTGCCATGG	-CAAA	gatatcaagaagatcccccaag...121...	tgctgtctctag	gtgtaagc
F.Cat	tttgccat	ggataaggaatg...170...	---cacttagttc-aggcggcttg	GTTCCCTTGCCATGG	-CAAA	gatatcaagaagatcccccaag...120...	tgctgtctctag	gtgtaagc
B.Tau	tttgccat	ggctaaggaatg...157...	---catttagttc-aggcggcttg	GTTCCCTTGCCATGG	-CAAA	gatatcaagaagatcccccaag...121...	tgctgtctctag	gtgtaagc
E.Cab	tttgccat	ggctaaggaatg...162...	---cgtttagttc-aggcggcttg	GTTCCCTTGCCATGG	-CAAA	gatatcaagaagatcccccaag...121...	tgctgtctctag	gtgtaagc
S.Sus	tttgccat	ggctaaggaatg...163...	---catttagttc-aggcggcttg	GTTCCCTTGCCATGG	-CAAA	gatatcaagaagatcccccaag...121...	tgctgtctctag	gtgtaagc
L.Afr	tttgccat	ggctaaggaatg...166...	---catttagttc-aggcggcttg	GTTCCCTTGCCATGG	-CAAA	gatatcaagaagatcccccaag...121...	tgctgtctctag	gtgtaagc
*****	** *****	* ** ** *	** ** *	*****	*****	*****	*****	*****

id=738484 gene=ENSG0000003756 name=RBM5 segment=chr3_50137606_50137964.1 type=AN VIEW

Figure 359:



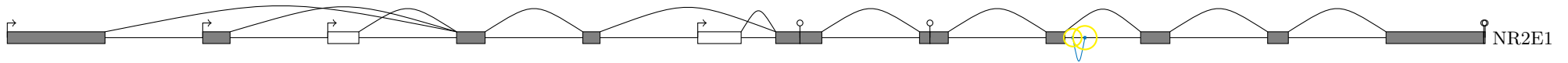
H. Sap	tTTGCCAT	ggCTAAggaa--tgtgactctttgaaaa--...321...tgctgtctctag	gtgtaagc
R. Mac	tTTGCCAT	ggCTAAggaa--tgtgactctttgaaaa--...320...tgctgtctctag	gtgtaagc
P. Tro	tTTGCCAT	ggCTAAggaa--tgtgactctttgaaaa--...326...tgctgtctctag	gtgtaagc
P. Abe	tTTGCCAT	ggCTAAggaa--tgtgactctttgaaaa--...349...tgctgtctctag	gtgtaagc
C. Jac	tTTGCCAT	ggCTAAggaa--tgtgactcttagaaaa--...333...tgctgtctctag	gtgtaagc
M. Mus	tTTGCCAT	ggCTAAggaatgatgactctttaa---...311...tgctgtctctag	gtgtaagc
C. Por	tTTGCCAT	ggCTAAggaatgtgtgacacttgaa---...322...tgctgtctctag	gtgtaagc
O. Cun	tTTGCCAT	ggCTAAggaa--tgtga--ctttgaaaacg...319...tgctgtctctag	gtgtaagc
C. Fam	tTTGCCAT	ggCTAAggaa--tgtgactctttgaaaa--...327...tgctgtctctag	gtgtaagc
B. Tau	tTTGCCAT	ggCTAAggaa--tgtgactctttgaaaa--...322...tgctgtctctag	gtgtaagc
E. Cab	tTTGCCAT	ggCTAAggaa--tgtgactctttgaaaa--...327...tgctgtctctag	gtgtaagc
S. Sus	tTTGCCAT	ggCTAAggaa--tgtgactctttgaaaa--...328...tgctgtctctag	gtgtaagc
L. Afr	tTTGCCAT	ggCTAAggaa--tgtgactctttgaaaa--...331...tgctgtctctag	gtgtaagc
	*****	***** ** ** *	***** *****

id=738484 gene=ENSG0000003756 name=RBM5 segment=chr3_50137606_50137964_1 type=AN

H. Sap	agtctcag	aactgagagaat...171...cttactgcctatctgaagga-	TTGGATGGgCAGAg	gtataggtggcggtggttgg...109...cttttcttacag-	aaaaagt
R. Mac	catctcag	aactgagagaat...171...cttactgcctatctgaagga-	TTGGATGGgCAGAg	gtataggtggcggtggttgg...109...cttttcttacag-	aaaaagt
P. Tro	agtctcag	aactgagagaat...171...cttactgcctatctgaagga-	TTGGATGGgCAGAg	gtataggtggcggtggttgg...109...cttttcttacag-	aaaaagt
P. Abe	aatctcag	aactgaggagaa...178...-ttactgcctatctgaagga-	TTGGATGGgCAGAg	gtataggtggcggtggttgg...110...-ttttcttacaga	aaaaagt
C. Jac	aatctcag	aactgggagagt...171...cttactgcctatctgaagga-	TTGGATGGgCAGAg	gtataggtggcggtggttgg...109...cttttcttacag-	aaaaagt
M. Mus	agtctcag	aactggaagagg...166...cttactgcctatctgaagga-	TTGGATGGgCAGAg	gtataggtggcggtggttgg...110...tttttttacag-	aaaaaatt
C. Por	agactgaa	gactgggagagg...170...cttactgcctatctgaagga-	TTGGATGGgCAGAg	gtataggtggcggtggttgg...108...cttttcttacag-	aaaaagt
O. Cun	aatctcag	aactgggaaagt...171...cttactgcctatctgaagga-	TTGGATGGgCAGAg	gtataggtggcggtggttgg...109...cttttcttacag-	aaaaagt
C. Fam	aatctcag	aactgggagaaat...171...cttactgcctatctgaagga-	TTGGATGGgCAGAg	gtataggtggcggtggttgg...110...tttttttacag-	aaaaagt
B. Tau	aacctcag	aactgggagagt...174...cttactgcctatctgaagga-	TTGGATGGgCAGAg	gtataggtggcggtggttgg...112...tttttttacag-	aaaaagt
E. Cab	aacctcag	aactgggagagt...176...cttactgcctatctgaagga-	TTGGATGGgCAGAg	gtataggtggcggtggttgg...109...cttttttacag-	aaaaagt
S. Sus	aacatcag	aactgggaaagt...171...cttactgcctatctgaagga-	TTGGATGGgCAGAg	gtataggtggcggtggttgg...109...cttttttacag-	aaaaagt
L. Afr	acaatcag	aactgggagaaac...163...cttactgcctatctgaagga-	TTGGATGGgCAGAg	gtataggtggcggtggttgg...119...tttttttacag-	aaaaagt
	* *	****	*****	*****	*** *****

id=738489 gene=ENSG0000003756 name=RBM5 segment=chr3_50140159_50140515_1 type=AN VIEW

Figure 360:



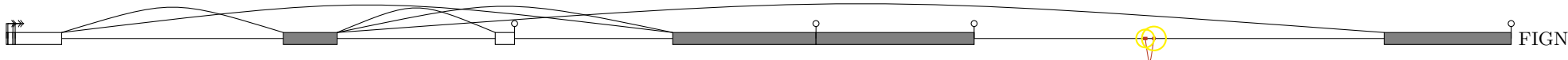
H. Sap	tgtatctg	gtaagaattgcacaat	taatgact	-----	TTGTTGTAGaAATT	accataaaaatacattactg	---..316...	ttttattctag	gcatgaac	
R. Mac	tgtatctg	gtaagaattgcacaat	tttaagact	-----	TTGTTGTAGaAATT	accataaaaatacattactg	---..316...	ttttattctag	gcatgaac	
P. Tro	tgtatctg	gtaagaattgcacaat	tttaagact	-----	TTGTTGTAGaAATT	accataaaaatacattactg	---..316...	ttttattctag	gcatgaac	
P. Abe	tgtatctg	gtaagaattgcacaat	tttaagact	-----	TTGTTGTAGaAATT	accataaaaatacattactg	---..316...	ttttattctag	gcatgaac	
C. Jac	tgtatctg	gtaagaattgcacaat	tttaagact	-----	TTGTTGTAGaAATT	accataaaaatacattactg	---..315...	ttttattctag	gcatgaac	
M. Mus	tgtatctg	gtaagaattgcacaat	tttaagact	ttgtttaga	aaattaccataaaaatacattactg	aaaaagACAACATGTAA	---agaataacaaattcccg	gg..277...	tttcaattctag	gcatgaac
C. Por	cgtttctg	gtaagaattgcacaat	tttaagact	-----	TTGTTGTAGaAATT	accataaaaatacattactg	---..311...	ttttattctag	gcatgaac	
O. Cun	tgtatctg	gtaagaattgcacaat	tttaagact	-----	TTGTTGTAGaAATT	accataaaaatacattactg	---..316...	ttttattctag	gcatgaac	
C. Fam	tgtatctg	gtaagaattgcacaat	tttaagact	-----	TTGTTGTAGaAATT	accataaaaatacattactg	---..316...	tttctattctag	gcatgaac	
F. Cat	tgtatctg	gtaagaattgcacaat	tttaagact	-----	TTGTTGTAGaAATT	accataaaaatacattactg	---..316...	tttctattctag	gcatgaac	
B. Tau	tgtatctg	gtaagaattgcacaat	tttaagact	-----	TTGTTGTAGaAATT	accataaaaatacattactg	---..316...	ttttattctag	gcatgaac	
E. Cab	tgtatctg	gtaagaattgcacaat	tttaagact	-----	TTGTTGTAGaAATT	accataaaaatacattactg	---..316...	ttttattctag	gcatgaac	
S. Sus	tgtatctg	gtaagaattgcacaat	tttaagact	-----	TTGTTGTAGaAATT	accataaaaatacattactg	---..315...	ttttattctag	gcatgaac	
O. Avi	tgtatctg	gtaagaattgcacaat	tttaagact	-----	TTGTTGTAGaAATT	accataaaaatacattactg	---..316...	ttttattctag	gcatgaac	
L. Afr	tgtatctg	gtaagaattgcacaat	tttaagact	-----	TTGTTGTAGaAATT	accataaaaatacattactg	---..316...	ttttattctag	gcatgaac	
	** **	*****	*****			* ** * ** * * ** *		*** **	*****	

id=500237 gene=ENSG00000112333 name=NR2E1 segment=chr6_108501624_108502010.1 type=IN

H. Sap	tgtatctg	gtaagaattgca...	55...--acaacatgtaaagaataaca--	AATTcCTGCtgAACAA	-tagagtatacctgtcattta...	252...ttttattctag	gcatgaac		
R. Mac	tgtatctg	gtaagaattgca...	55...--acaacatgtaaagaataaca--	AATTcCTGCtgAACAA	-tagagtatacctgtcattta...	252...ttttattctag	gcatgaac		
P. Tro	tgtatctg	gtaagaattgca...	55...--acaacatgtaaagaataaca--	AATTcCTGCtgAACAA	-tagagtatacctgtcattta...	252...ttttattctag	gcatgaac		
P. Abe	tgtatctg	gtaagaattgca...	55...--acaacatgtaaagaataaca--	AATTcCTGCtgAACAA	-tagagtatacctgtcattta...	252...ttttattctag	gcatgaac		
C. Jac	tgtatctg	gtaagaattgca...	55...--acaacatgtaaagaataaca--	AATTcCTGCtgAACAA	-tagagtatacctgtcattta...	251...ttttattctag	gcatgaac		
M. Mus	tgtatctg	gtaagaattgca...	165...cattgttatttaaagcaaa	TTACtGTGtTGTT	atcatccaagagaag-----	at...144...tttcaattctag	gcatgaac		
C. Por	cgtttctg	gtaagaattgca...	54...--acaacatgtaaagaataaca--	AATTcCTGCtgAACAA	-tagagtatacctgtcattta...	248...ttttattctag	gcatgaac		
O. Cun	tgtatctg	gtaagaattgca...	55...--acaacatgtaaagaataaca--	AATTcCTGCtgAACAA	-tagagtatacctgtcattta...	252...ttttattctag	gcatgaac		
C. Fam	tgtatctg	gtaagaattgca...	55...--acaacatgtaaagaataaca--	AATTcCTGCtgAACAA	-tagagtatacctgtcattta...	252...tttctattctag	gcatgaac		
F. Cat	tgtatctg	gtaagaattgca...	55...--acaacatgtaaagaataaca--	AATTcCTGCtgAACAA	-tagagtatacctgtcattta...	252...tttctattctag	gcatgaac		
B. Tau	tgtatctg	gtaagaattgca...	55...--acaacatgtaaagaataaca--	AATTcCTGCtgAACAA	-tagagtatacctgtcattta...	252...ttttattctag	gcatgaac		
E. Cab	tgtatctg	gtaagaattgca...	55...--acaacatgtaaagaataaca--	AATTcCTGCtgAACAA	-tagcgtatacctgtcattta...	252...ttttattctag	gcatgaac		
S. Sus	tgtatctg	gtaagaattgca...	55...--acaacatgtaaagaataaca--	AATTcCTGCtgAACAA	-tagagtatacctgtcattta...	251...ttttattctag	gcatgaac		
O. Avi	tgtatctg	gtaagaattgca...	55...--acaacatgtaaagaataaca--	AATTcCTGCtgAACAA	-tagagtatacctgtcattta...	252...ttttattctag	gcatgaac		
L. Afr	tgtatctg	gtaagaattgca...	55...--acaacatgtaaagaataaca--	AATTcCTGCtgAACAA	-tagagtatacctgtcattta...	252...ttttattctag	gcatgaac		
	** **	*****	** **	**	* ** *	* **	****	*** **	*****

id=500237 gene=ENSG00000112333 name=NR2E1 segment=chr6_108501624_108502010.1 type=IN VIEW

Figure 363:



H. Sap	taaaaaaa	t-tgcagtttgat-...4632...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tg----	ggagcaacacttaaagtt...	252...	tttctcttgag	caaatg	
R. Mac	taaaaaaa	t-tgcagtttgat-...4632...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tg----	ggagcaacacttaaagtt...	252...	tttctcttgag	caaatg	
P. Tro	taaaaaaa	t-tgcagtttgat-...4632...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tg----	ggagcaacacttaaagtt...	252...	tttctcttgag	caaatg	
P. Abe	aaaaaa	t-cgcagtttgat-...4632...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCA-----	-----	-----	-----	gttcggtggtcactgtt	---	t...278...	tttctcttgag	caaatg
C. Jac	taaaaaaa	t-tgcagtttgat-...4632...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tg----	ggagcaacacttaaagtt...	252...	tttctcttgag	caaatg	
M. Mus	tacaacaa	tatgcagtttga--...4624...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tg----	ggagcaacacttaaagtt...	260...	tttctcttgag	caaatg	
C. Por	aaaaaa	t-tgcagtttgat-...4632...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tg----	ggagcaacacttaaagtt...	252...	tttctcttgag	caaatg	
O. Cun	taaagaag	t-tgtagtttgat-...4631...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tg----	ggagcaacacttaaagtt...	253...	tttctcttgag	caaatg	
C. Fam	-aaaaaat	attgca-tttgatt...4630...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tg----	ggagcaacacttaaagtt...	254...	tttctcttgag	caaatg	
F. Cat	taaaaaac	ctcgca-tttcat-...4622...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tg----	ggagcaacacttaaagtt...	262...	tttctctgag	caaatg	
B. Tau	taaaaaag	atggca-tttgat-...4631...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tg----	ggagcaacacttaaagtt...	253...	tttctctgag	caatatg	
E. Cab	-aaaaaat	actgca-tttgatt...4632...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tg----	ggagcaacacttaaagtt...	252...	tttctctgag	caaatg	
L. Afr	taaaaaaa	t-tgcagtttgat-...4632...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tg----	ggagcaacacttaaagtt...	252...	tttctctgag	caaatg	

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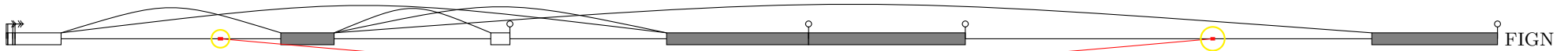
id=306409 gene=ENSG00000182263 name=FIGN segment=chr2.164450307.164459120.-1 type=IN

H. Sap	taaaaaaa	t-tgcagtttgat-...4632...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tgggagcaacacttaaagtt...	252...	tttctcttgag	caaatg
R. Mac	taaaaaaa	t-tgcagtttgat-...4632...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tgggagcaacacttaaagtt...	252...	tttctcttgag	caaatg
P. Tro	taaaaaaa	t-tgcagtttgat-...4632...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tgggagcaacacttaaagtt...	252...	tttctcttgag	caaatg
P. Abe	aaaaaa	t-cgcagtttgat-...4661...	-----	agagcatgttgcgtggtcac	-----	-----	-----	-----	-----	-----	-----	-----
C. Jac	taaaaaaa	t-tgcagtttgat-...4632...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tgggagcaacacttaaagtt...	252...	tttctcttgag	caaatg
M. Mus	tacaacaa	tatgcagtttga--...4624...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tgggagcaacacttaaagtt...	260...	tttctcttgag	caaatg
C. Por	aaaaaa	t-tgcagtttgat-...4632...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tgggagcaacacttaaagtt...	252...	tttctcttgag	caaatg
O. Cun	taaagaag	t-tgtagtttgat-...4631...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tgggagcaacacttaaagtt...	253...	tttctctgag	caaatg
C. Fam	-aaaaaat	attgca-tttgatt...4630...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tgggagcaacacttaaagtt...	254...	tttctctgag	caaatg
F. Cat	taaaaaac	ctcgca-tttcat-...4622...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tgggagcaacacttaaagtt...	262...	tttctctgag	caaatg
B. Tau	taaaaaag	atggca-tttgat-...4631...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tgggagcaacacttaaagtt...	253...	tttctctgag	caatatg
E. Cab	-aaaaaat	actgca-tttgatt...4632...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tgggagcaacacttaaagtt...	252...	tttctctgag	caaatg
L. Afr	taaaaaaa	t-tgcagtttgat-...4632...	.gctcctctctgagagcaggc	ATTAA	GCACag	AGCATGGTg	CGTGGTCAc	TGTTGTGCTAAT	tgggagcaacacttaaagtt...	252...	tttctctgag	caaatg

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id=306409 gene=ENSG00000182263 name=FIGN segment=chr2.164450307.164459120.-1 type=IN VIEW

Figure 364:



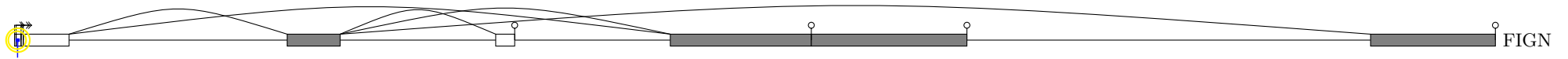
H.Sap	gcgttcag	gtaagaggagct...524...	gtattgttggcaaggaacgg	GAGAGa	AAGATGta	TAATTT	aatggtatatacaatccact...157...	atatgcatgtag	gttaa	atg
R.Mac	gcgttcag	gtaagaggagct...524...	gtattgttggcaaggaacgg	GAGAGa	AAGATGta	TAATTT	aatggtatatacaatccact...157...	atatgcatgtag	gttaa	atg
P.Tro	gcgttcag	gtaagaggagct...523...	gtattgttggcaaggaacgg	GAGAGa	AAGATGta	TAATTT	aatggtatatacaatccact...157...	atatgcatgtag	gttaa	atg
P.Abe	gcgttcag	gtaagaggagct...524...	gtattgttggcaaggaacgg	GAGAGa	AAGATGta	TAATTT	aatggtatatacaatccact...157...	atatgcatgtag	gttaa	atg
C.Jac	gcgttcag	gtaagaggagct...524...	gtattgttggccaggaacgg	GAGAGa	AAGATGta	TAATTT	aatggtatatacaatccact...158...	atatgcatgtag	gttaa	atg
M.Mus	gcgtccag	gtaagaggagct...536...	gtattgttggcaaggaacgg	GAGAGa	AAGATGta	TAATTT	aatggtatatacaatccact...157...	atatgcatgtag	gttaa	atg
C.Por	gcgttcag	gtaagaggagcc...532...	gtattgttggcaaggaacgg	GAGAGa	AAGATGta	TAATTT	aatggtatatacaatccact...157...	atatgcatgtag	gttaa	atg
O.Cun	gcgttcag	gtaagaagagct...535...	gtattgttggcaaggaacgg	GAGAGa	AAGATGta	TAATTT	aatggtatatacaatccact...157...	atatgcatgtag	gttaa	atg
C.Fam	gcgttcag	gtaaggggagct...610...	gtattgttggcaaggaacgg	GAGAGa	AAGATGta	TAATTT	aatggtatatacaatccact...157...	atatgcatgtag	gttaa	atg
F.Cat	gcgttcag	gtaagaggagct...539...	gtattgttggcaaggaacgg	GAGAGa	AAGATGta	TAATTT	aatggtatatacaatccact...157...	atatgcatgtac	gttaa	atg
B.Tau	gagttcag	gtaagaggagct...532...	gtattgttggcaaggaacgg	GAGAGa	AAGATGta	TAATTT	aatggtatatacaatccact...157...	atatgcatgtag	gttaa	atg
E.Cab	gcgttcag	gtaagaggagct...531...	gtattgttggcaaggaacgg	GAGAGa	AAGATGta	TAATTT	aatggtatatacaatccact...157...	atatgcatgtag	gttaa	atg
O.Avi	gagttcag	gtaagaggagct...531...	gtattgttagcaaggaacgg	GAGAGa	AAGATGta	TAATTT	aatggtatatacaatccact...157...	atatgcatgtag	gttaa	atg
L.Afr	gcgttcag	gtaagaagagct...536...	gtattgttggcaaggaacgg	GAGAGa	AAGATGta	TAATTT	aatggtatatacaatccact...157...	atatgcatgtag	gttaa	atg
	* * * *	*****	*****	*****	*****	*****	*****	*****	*****	*****

id=306402 gene=ENSG00000182263 name=FIGN segment=chr2_164591583_164592347_-1 type=IN

H.Sap	taaaaaaa	t-tgcagtttgat...4878...	atccttagggaacatagaca	AAATTACATCTT	caTCTC	atcaaacattcagccatatt...29...	tttctcttgtag	caaatg
R.Mac	taaaaaaa	t-tgcagtttgat...4878...	atccttagggaacatagaca	AAATTACATCTT	caTCTC	atcaaacattcagccatatt...29...	tttctcttgtag	caaatg
P.Tro	taaaaaaa	t-tgcagtttgat...4878...	atccttagggaacatagaca	AAATTACATCTT	caTCTC	atcaaacattcagccatatt...29...	tttctcttgtag	caaatg
P.Abe	aaaaaaaa	t-cgcagtttgat...4878...	atccttagggaacatagaca	AAATTACATCTT	caTCTC	atcaaacattcagccatatt...29...	tttctcttgtag	caaatg
C.Jac	taaaaaaa	t-tgcagtttgat...4878...	atccttagggaacgtagaca	AAATTACATCTT	caTCTC	atcaaacattcagccatatt...29...	tttctcttgtag	caaatg
M.Mus	tacaacaa	tatgcagtttga...4878...	atccttagggaacatagaca	AAATTACATCTT	caTCTC	atcaaacattcagccatatt...29...	tttctcttgtag	caaatg
C.Por	aaaaaaaa	t-tgcagtttgat...4878...	atccttagggaacatagaca	AAATTACATCTT	caTCTC	atcaaacattcagccatatt...29...	tttctcttgtag	caaatg
O.Cun	taagaag	t-tgtagttgat...4878...	atccttagggaacatagaca	AAATTACATCTT	caTCTC	atcaaacattcagccatatt...29...	tttctcttgtag	caaatg
C.Fam	-aaaaaat	atgca-tttgatt...4878...	atccttagggaacatagaca	AAATTACATCTT	caTCTC	atcaaacattcagccatatt...29...	tttctcttgtag	caaatg
F.Cat	taaaaaac	ctcgca-tttcat...4878...	atccttagggaacatagaca	AAATTACATCTT	caTCTC	atcaaacattcagccatatt...29...	tttctcttgtag	caaatg
B.Tau	taaaaaag	atggca-tttgat...4878...	atccttagggaacatagaca	AAATTACATCTT	caTCTC	atcaaacattcagccatatt...29...	tttctcttgtag	caaatg
E.Cab	-aaaaaat	actgca-tttgatt...4878...	atccttagggaacatagaca	AAATTACATCTT	caTCTC	atcaaacattcagccatatt...29...	tttctcttgtag	caaatg
O.Avi	taaaaaag	atggca-tttgat...4878...	atccttagggaacatagaca	AAATTACATCTT	caTCTC	atcaaacattcagccatatt...29...	tttctcttgtag	caaatg
L.Afr	taaaaaaa	t-tgcagtttgat...4878...	atccttagggagcatagaca	AAATTACATCTT	caTCTC	atcaaacattcagccatatt...29...	tttctcttgtag	caaatg
	* * *	* * * *	*****	*****	*****	*****	*****	*****

id=306409 gene=ENSG00000182263 name=FIGN segment=chr2_164450307_164459120_-1 type=IN VIEW

Figure 365:



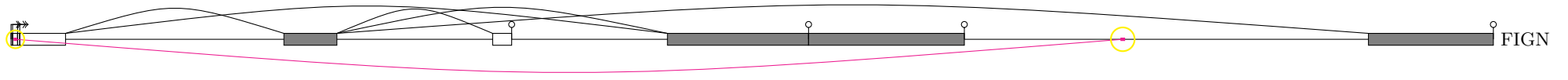
H. Sap	--t	TCCAAGC	AGCTGTT	ttgggt
R. Mac	--t	TCCAAGC	AGCTGTT	ttgggt
P. Tro	--t	TCCAAGC	AGCTGTT	ttgggt
P. Abe	--t	TCCAAGC	AGCTGTT	ttgggt
C. Jac	--t	TCCAAGC	AGCTGTT	ttgggt
M. Mus	--t	TCCAAGC	AGCTGTT	ttgggt
R. Nor	--t	TCCAAGC	AGCTGTT	ttgggt
C. Por	--t	TCCAAGC	AGCTGTT	ttgggt
O. Cun	--t	TCCAAGC	AGCTGTT	ttgggt
F. Cat	--t	TCCAAGC	AGCTGTT	ttgggt
B. Tau	--t	TCCAAGC	AGCTGTT	ttgggt
E. Cab	--c	TCCAAGC	AGCTGTT	ttgggt
O. Avi	--t	TCCAAGC	AGCTGTT	ttgggt
L. Afr	ttg--	CAAGC	AGCTGTT	ttgggt
		****	*****	*****

id=306398 gene=ENSG00000182263 name=FIGN segment=chr2_164592518_164592522_-1 type=E5

H. Sap	aGC	AGCTG	tTTGGG	tttgaaatt	ccaacatg
R. Mac	aGC	AGCTG	tTTGGG	tttgaaatt	ccaacatg
P. Tro	aGC	AGCTG	tTTGGG	tttgaaatt	ccaacatg
P. Abe	aGC	AGCTG	tTTGGG	tttgaaatt	ccaacatg
C. Jac	aGC	AGCTG	tTTGGG	tttgaaatt	ccaacatg
M. Mus	aGC	AGCTG	tTTGGG	tttgaaatt	ccaacatg
R. Nor	aGC	AGCTG	tTTGGG	tttgaaatt	ccaacatg
C. Por	aGC	AGCTG	tTTGGG	tttgaaatt	ccaacatg
O. Cun	aGC	AGCTG	tTTGGG	tttgaaatt	ccaacatg
F. Cat	aGC	AGCTG	tTTGGG	tttgaaatt	ccaacatg
B. Tau	aGC	AGCTG	tTTGGG	tttgaaatt	ccaacatg
E. Cab	aGC	AGCTG	tTTGGG	tttgaaatt	ccaacatg
O. Avi	aGC	AGCTG	tTTGGG	tttgaaatt	ccaacatg
L. Afr	aGC	AGCTG	tTTGg	tttgaaatt	ccaacatg
	***	*****	*****	*****	*****

id=306399 gene=ENSG00000182263 name=FIGN segment=chr2_164592502_164592517_-1 type=E5 VIEW

Figure 367:



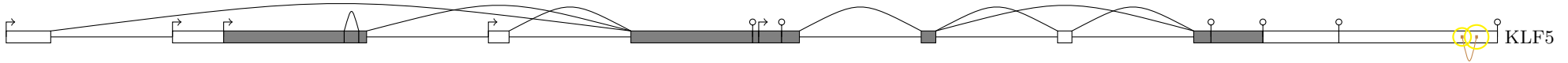
H.Sap	ttccaagc	AGCTGTTTGGGt
R.Mac	ttccaagc	AGCTGTTTGGGt
P.Tro	ttccaagc	AGCTGTTTGGGt
P.Abe	ttccaagc	AGCTGTTTGGGt
C.Jac	ttccaagc	AGCTGTTTGGGt
M.Mus	ttccaagc	AGCTGTTTGGGt
C.Por	ttccaagc	AGCTGTTTGGGt
O.Cun	ttccaagc	AGCTGTTTGGGt
C.Fam	cttcttgc	AGCTGTTTGGGt
F.Cat	ttccaagc	AGCTGTTTGGGt
B.Tau	ttccaagc	AGCTGTTTGGGt
E.Cab	cttcaagc	AGCTGTTTGGGt
L.Afr	ttgcaagc	AGCTGTTTGGGt
	* * *	*****

id=306398 gene=ENSG00000182263 name=FIGN segment=chr2_164592518_164592522_-1 type=E5

H.Sap	taaaaaa	t-tgcagtttgat-...4599...	tttttctcctccacctcag	ACCTTCAAAACcAGCT	cctctctgagagcaggcatt...310...	tttctcttgag	caacatgg
R.Mac	taaaaaa	t-tgcagtttgat-...4599...	tttttctcctccacctcag	ACCTTCAAAACcAGCT	cctctctgagagcaggcatt...310...	tttctcttgag	caaatatgg
P.Tro	taaaaaa	t-tgcagtttgat-...4599...	tttttctcctccacctcag	ACCTTCAAAACcAGCT	cctctctgagagcaggcatt...310...	tttctcttgag	caacatgg
P.Abe	aaaaaaa	t-cgcagtttgat-...4599...	tttttctcctccacctcag	ACCTTCAAAACcAGCT	cctctctgagagcaggcatt...310...	tttctcttgag	caacatgg
C.Jac	taaaaaa	t-tgcagtttgat-...4599...	tttttctcctccacctcag	ACCTTCAAAACcAGCT	cctctctgagagcaggcatt...310...	tttctcttgag	caacatgg
M.Mus	tacaacaa	tatgcagtttga-...4591...	tttttctcctccacctcag	ACCTTCAAAACcAGCT	cctctctgagagcaggcatt...318...	tttctcttgag	caacatgg
C.Por	aaaaaaa	t-tgcagtttgat-...4599...	tttttctcctccacctcag	ACCTTCAAAACcAGCT	cctctctgagagcaggcatt...310...	tttctcttgag	caacatgg
O.Cun	taagaag	t-tgtagtttggat-...4598...	tttttctcctccacctcag	ACCTTCAAAACcAGCT	cctctctgagagcaggcatt...311...	tttctcttgag	caacatgg
C.Fam	-aaaaaat	attgca-tttgatt...4597...	tttttctcctccacctcag	ACCTTCAAAACcAGCT	cctctctgagagcaggcatt...312...	tttctcttgag	caacatgg
F.Cat	taaaaaac	ctcgca-tttcat-...4589...	tttttctcctccacctcag	ACCTTCAAAACcAGCT	cctctctgagagcaggcatt...320...	tttctcttgag	caacatgg
B.Tau	taaaaaag	atggca-tttgat-...4598...	tttttctcctccacctcag	ACCTTCAAAACcAGCT	cctctctgagagcaggcatt...311...	tttctcttgag	caaatatg
E.Cab	-aaaaaat	actgca-tttgatt...4599...	tttttctcctccacctcag	ACCTTCAAAACcAGCT	cctctctgagagcaggcatt...310...	tttctcttgag	caacatgg
L.Afr	taaaaaa	t-tgcagtttgat-...4599...	tttttctcctccacctcag	ACCTTCAAAACcAGCT	cctctctgagagcaggcatt...310...	tttctcttgag	caacatgg
	* * *	* * * * *	*****		*****	*****	*** * *

id=306409 gene=ENSG00000182263 name=FIGN segment=chr2_164450307_164459120_-1 type=IN VIEW

Figure 368:



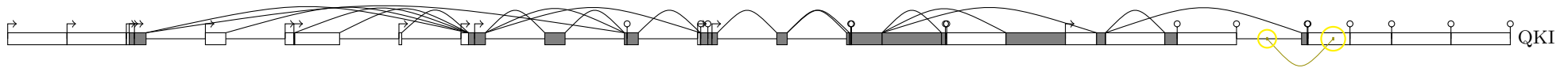
H.Sap	ttgagta-g--	ttttttcaata-...1044...atgaaaagcagaaatcggtt	GCTGt	TTTGCTTC	tttttccctcttattttgt...114...gtgcctaaaag-a	tgtatgtg
R.Mac	ttgagta-g--	ttttttcaata-...1039...atgaaaagcataaattggtt	GCTGt	TTTGCTTC	tttttccctcttattttgt...112...gtgcctaaaag-a	tgtatgtt
P.Tro	ttgagta-g--	ttttttcaata-...1044...atgaaaagcataaattggtt	GCTGt	TTTGCTTC	tttttccctcttattttgt...114...gtgcctaaaag-a	tgtatgtg
P.Abe	ttgagta-g--	ttttttcaata-...1044...atgaaaagcataaattggtt	GCTGt	TTTGCTTC	tttttccctcttattttgt...119...gtgcctaaaag-a	tatatgtt
C.Jac	-tgagtagg--	ttttttcaata-...1045...atgaaaagcataaattggtt	GCTGt	TTTGCTTC	tttttccctcttattttgt...112...gtgcctaaaag-a	tatgtgtt
C.Por	tggcatagg--	-ttttgtcagga-...988...ataaaaagcataaattggtt	GCTGt	TTTGCTTC	tttttccctcttattttgtat...110...gtgcctaaaag-t	gttttggg
O.Cun	tcgagtagg--	-tttttgagga-...1000...ataaaaagcataaattggtt	GCTGt	TTTGCTTC	tttttccctcttattttgt...111...gtgcctaaaag-a	ttcatggt
C.Fam	tcaagta-g--	ttttttcaata-...994...atacgaagcataaattggtt	GCTGt	TTTGCTTC	tttttccctcttattttgt...112...gtgcctaaaag-a	tttatggt
F.Cat	---agtagggt	ttttttcaata-...1004...ataaaaagcataaattggtt	GCTGt	TTTGCTTC	tttttccctcttattttgt...113...gtgcctaaaag-a	ttcatgtc
B.Tau	---catcagag	ttttttcaata-...1044...aggaagcataaattggtt	GCTGt	TTTGCTTC	tttttccctcttattttgt...115...gtgcctaaaag-a	ttcatggt
S.Sus	taagaggag--	-ttttttcaata-...1042...atgaaaagcataaattggtt	GCTGt	TTTGCTTC	tttttccctcttattttgt...114...gtgcctaaaag-a	ttcatgtc
O.Avi	-cagaggag--	-ttttttttcaa...1038...aggaagcataaattggtt	GCTGt	TTTGCTTC	tttttccctcttattttgt...114...-agcctaaaagaa	ttcacggt
L.Afr	---tggggata	tgttttcaata-...1008...ataaaaagcataaattggtt	GCTGt	TTTGCTTC	tttttccctcttattttgt...115...gtgcctgaaat-a	ttcatggt
		*** * *		***** **	***** **	*

id=594253 gene=ENSG00000102554 name=KLF5 segment=chr13.73650442.73651676.1 type=E3

H.Sap	ttgagta-g--	ttttttcaata-...1104...tcatttcctatgcaaataat	GGAGCAAACAGCt	gtatagttgtagaat	ttttt...55...gtgcctaaaag-a	tgtatgtg
R.Mac	ttgagta-g--	ttttttcaata-...1099...tcatttcctatgcaaataat	GGAGCAAACAGCt	gtatagttgtagaat	ttttt...53...gtgcctaaaag-a	tgtatggt
P.Tro	ttgagta-g--	ttttttcaata-...1104...tcatttcctatgcaaataat	GGAGCAAACAGCt	gtatagttgtagaat	ttttt...55...gtgcctaaaag-a	tgtatgtg
P.Abe	ttgagta-g--	ttttttcaata-...1104...tcatttcctatgcaaataat	GGAGCAAACAGCt	gtatagttgtggaat	ttttt...60...gtgcctaaaag-a	tatatgtt
C.Jac	-tgagtagg--	ttttttcaata-...1105...tcatttcctatgcaaataat	GGAGCAAACAGCt	gtataattgtagaat	ttttt...53...gtgcctaaaag-a	tatgtgtt
C.Por	tggcatagg--	-ttttgtcagga-...1046...tcatttcctatgcaaataat	GGAGCAAACAGCt	gtatagttgtagaat	ttttt...53...gtgcctaaaag-t	gttttggg
O.Cun	tcgagtagg--	-tttttgagga-...1060...tcatttcctatacaataat	GGAGCAAACAGCt	gtatagttgtagaat	ttttt...52...gtgcctaaaag-a	ttcatggt
C.Fam	tcaagta-g--	ttttttcaata-...1054...tcatttcctatgcaaataat	GGAGCAAACAGCt	gtatagttgtagaat	ttttt...53...gtgcctaaaag-a	tttatggt
F.Cat	---agtagggt	ttttttcaata-...1064...tcatttcctatgcaaataat	GGAGCAAACAGCt	gtatagttgtagaat	ttttt...54...gtgcctaaaag-a	ttcatgtc
B.Tau	---catcagag	ttttttcaata-...1104...tcatttcctatgcaaataat	GGAGCAAACAGCt	gtatagttgtagaat	ttttt...56...gtgcctaaaag-a	ttcatggt
S.Sus	taagaggag--	-ttttttcaata-...1102...tcatttcctatgcaaataat	GGAGCAAACAGCt	gtatagttgtagaat	ttttt...55...gtgcctaaaag-a	ttcatgtc
O.Avi	-cagaggag--	-ttttttttcaa...1098...tcatttcctatgcaaataat	GGAGCAAACAGCt	gtatagttgtagaat	ttttt...55...-agcctaaaagaa	ttcacggt
L.Afr	---tggggata	tgttttcaata-...1068...tcatttcctatgcaaataat	GGAGCAAACAGCt	gtatagttgtagaat	ttttt...56...gtgcctgaaat-a	ttcatggt
		*** * *		***** **	***** **	*

id=594253 gene=ENSG00000102554 name=KLF5 segment=chr13.73650442.73651676.1 type=E3 VIEW

Figure 369:



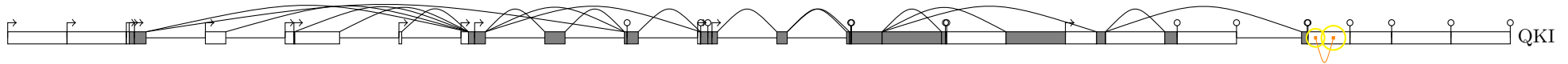
H. Sap	aaaagaaa	ccttgttggcc...	210	..	tttcaatttccttcattgac	TGCTACTAa	CTATTAGT	tgtagttg-tattttatttc...	257	..	ctaaccaccag	cgccacc
R. Mac	aaaagaaa	ccttgttggcc...	210	..	tttcaatttccttcattgac	TGCTACTAa	CTATTAGT	tgtagttg-tattttatttc...	276	..	ctaaccaccag	cgccacc
P. Tro	aaaagaaa	ccttgttggcc...	210	..	tttcaatttccttcattgac	TGCTACTAa	CTATTAGT	tgtagttg-tattttatttc...	264	..	ctaaccaccag	cgccacc
P. Abe	aaaagaaa	ccttgttggcc...	210	..	tttcaatttccttcattgac	TGCTACTAa	CTATTAGT	tgtagttg-tattttatttc...	259	..	ctaaccaccag	cgccacc
C. Jac	aaaagaaa	ccttgttggcc...	209	..	tttcagtttccttcattgac	TGCTACTAa	CTATTAGT	tgtagttg-tattttatttc...	262	..	ctaaccaccag	cgccacc
M. Mus	aaaagaaa	ccttgttggcc...	208	..	ttccaatttccttcattgac	TGCTACTAa	CTATTAGT	tgtagctg-tattttatttc...	258	..	ctaaccaccag	cgccacc
R. Nor	aaaagaaa	ccttgttggcc...	209	..	ttccaatttccttcattgac	TGCTACTAa	CTATTAGT	tgtagctg-tattttatttc...	257	..	ctaaccaccag	cgccacc
O. Cun	aaaagaaa	cc-tgttggccc...	208	..	ttccaatttccttcattgac	TGCTACTAa	CTATTAGT	tgtagttg-tattttatttc...	269	..	ctaaccaccag	cgccacc
C. Fam	aaaagaaa	ccttgttggcc...	213	..	ctccaatttccttcattgac	TGCTACTAa	CTATTAGT	tgtagttg-tattttatttc...	286	..	ctaaccaccag	cgccacc
B. Tau	aaaagaaa	ccttgttggcc...	213	..	ttccagtttccttcattgac	TGCTACTAa	CTATTAGT	tgtagttg-tattttatttc...	269	..	ctaaccaccag	cgccacc
E. Cab	aaaagaaa	ccttgttggcc...	213	..	ttccaatttccttcattgac	TGCTACTAa	CTATTAGT	tgtagttg-tattttatttc...	253	..	ctaaccaccag	cgccacc
S. Sus	aaaagaaa	ccttgttggcc...	213	..	ttccaatttccttcattgac	TGCTACTAa	CTATTAGT	tgtagttg-tattttatttc...	260	..	ctaaccaccag	cgccacc
O. Avi	aaaagaaa	ccttgttggcc...	213	..	ttccagtttccttcattgac	TGCTACTAa	CTATTAGT	tgtagttg-tattttatttc...	262	..	ctaaccaccag	cgccacc
L. Afr	aaaagaaa	ccttgttggcc...	211	..	ttccagtttccttcattgac	TGCTACTAa	CTATTAGT	tgtagtta-tattttatttc...	265	..	ctaaccaccag	cgccacc
	*****	* **** *			* ** ** * *****						*****	*****

id=65746 gene=ENSG0000112531 name=QKI segment=chr6_163991178_163991725_1 type=IN

H. Sap	ac	ccaatg	atgacctgacca...	164	..	aaagtggttctagaactgc	ACTGa	ATAGTAGT	aaAGCA	ataaggccaattcatcca...	107	..	-tgtgagagactt	ctaggaat
R. Mac	ac	ccaatg	atgacctgacca...	163	..	aaagtggttctagaactgc	ACTGa	ATAGTAGT	aaAGCA	ataaggccaattcatcca...	107	..	-tgtgagagactt	ctaggaat
P. Tro	ac	ccaatg	atgacctgacca...	166	..	aaagtggttctagaactgc	ACTGa	ATAGTAGT	aaAGCA	ataaggccaattcatcca...	107	..	-tgtgagagactt	ctaggaat
P. Abe	ac	ccaatg	atgacctgacca...	167	..	aaagtggttctagaactgc	ACTGa	ATAGTAGT	aaAGCA	ataaggccaattcatcca...	111	..	-tgtgagagactt	ctaggaat
C. Jac	ac	ccaatg	atgacctgacca...	164	..	aaagtggttctagaactgc	ACTGa	ATAGTAGT	aaAGCA	ataaggccaattcatcca...	107	..	-tgtgagagactt	ctaggaat
M. Mus	ac	ccaatg	atgacctgacca...	153	..	aaagtggttctagaactgc	ACTGa	ATAGTAGT	aaAGCA	ataaggccaattcatcca...	106	..	-tgtgagagactt	gtaggaat
R. Nor	ac	ccaatg	atgacctgacca...	153	..	aaagtggttctagaactgc	ACTGa	ATAGTAGT	aaAGCA	ataaggccaattcatcca...	106	..	-tgtgagagactt	gtaggaat
O. Cun	ac	ccaatg	atgacctgacca...	172	..	aaagtggttctagaactgc	ACTGa	ATAGTAGT	aaAGCA	ataaggccaattcatcca...	89	..	-tgtgagagactt	ctaggaac
C. Fam	ac	ccaatg	atgacctgacca...	161	..	aaagtggttctagaactgc	ACTGa	ATAGTAGT	aaAGCA	ataaggccaattcatcca...	107	..	-tgtgagagactt	ctaggaac
B. Tau	ac	ccaatg	atgacctgacca...	172	..	aaagtggttctagaactgc	ACTGa	ATAGTAGT	aaAGCA	ataaggccaattcatcca...	107	..	-tgtgagagactt	ctaggaac
E. Cab	ac	ccaatg	atgacctgacca...	160	..	aaagtggttctagaactgc	ACTGa	ATAGTAGT	aaAGCA	ataaggccaattcatcca...	107	..	-tgtgagagactt	ctaggaat
S. Sus	ac	ccaatg	atgacctgacca...	198	..	aaagtggttctagaactgc	ACTGa	ATAGTAGT	aaAGCA	ataaggccaattcatcca...	107	..	-tgtgagagactt	ctaggaat
O. Avi	ac	ccaatg	atgacctgacca...	171	..	aaagtggttctagaactgc	ACTGa	ATAGTAGT	aaAGCA	ataaggccaattcatcca...	106	..	-tgtgagagactt	ctaggaat
L. Afr	ac	ccaatg	atgacctgacca...	155	..	aaagcggttctagaactgc	ACTGa	ATAGTAGT	aaAGCA	ataaggccaattcatcca...	101	..	-tgtgagagactt	ccggagcc
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id=65749 gene=ENSG0000112531 name=QKI segment=chr6_163991780_163992133_1 type=EN VIEW

Figure 370:



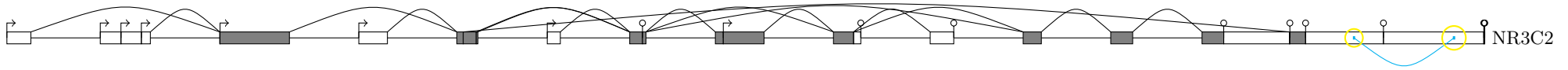
H. Sap	ac	ccaatg	atgacctgacctgacctgctgctgatcagttaactggttaac	GCCTTTGCTTGCTGCTGT	cg	TCAGTGCAG	cgagctgaggcacttgtccg...252...-tgtgagagactt	ctaggaat
R. Mac	ac	ccaatg	atgacctgacctgacctgctgctgatcagttaactggttaac	GCCTTTGCTTGCTGCTGT	cg	TCAGTGCAG	cgagctgaggcacttgtccg...251...-tgtgagagactt	ctaggaat
P. Tro	ac	ccaatg	atgacctgacctgacctgctgctgatcagttaactggttaac	GCCTTTGCTTGCTGCTGT	cg	TCAGTGCAG	cgagctgaggcacttgtccg...254...-tgtgagagactt	ctaggaat
P. Abe	ac	ccaatg	atgacctgacctgacctgctgctgatcagttaactggttaac	GCCTTTGCTTGCTGCTGT	cg	TCAGTGCAG	cgagctgaggcacttgtccg...259...-tgtgagagactt	ctaggaat
C. Jac	ac	ccaatg	atgacctgacctgacctgctgctgatcagttaactggttaac	GCCTTTGCTTGCTGCTGT	cg	TCAGTGCAG	caagctgaggcacttgtccg...252...-tgtgagagactt	ctaggaat
M. Mus	ac	ccaatg	atgacctgacctgacctgctgctgatcagttaactggt	AATCGCCTTTGCTTGCTGCTGT	cg	TCAGTGCAG	cgagctgaggcacttgtccg...240...-tgtgagagactt	gtaggaat
R. Nor	ac	ccaatg	atgacctgacctgacctgctgctgatcagttaactggt	AATCGCCTTTGCTTGCTGCTGT	cg	TCAGTGCAG	cgagctgaggcacttgtccg...240...-tgtgagagactt	gtaggaat
O. Cun	ac	ccaatg	atgacctgacctgacctgctgctgatcagttaactggttaac	GCCTTTGCTTGCTGCTGT	cg	TCAGTGCAG	cgagctgaggcacttgtccg...242...-tgtgagagactt	ctaggaac
C. Fam	ac	ccaatg	atgacctgacctgacctgctgctgatcagttaactggttaac	GCCTTTGCTTGCTGCTGT	cg	TCAGTGCAG	cgagctgaggcacttgtccg...249...-tgtgagagactt	ctaggaac
B. Tau	ac	ccaatg	atgacctgacctgacctgctgctgatcagttaactggttaac	GCCTTTGCTTGCTGCTGT	cg	TCAGTGCAG	cgagctgaggcacttgtccg...260...-tgtgagagactt	ctaggaac
E. Cab	ac	ccaatg	atgacctgacctgacctgctgctgatcagttaactggttaac	GCCTTTGCTTGCTGCTGT	cg	TCAGTGCAG	cgagctgaggcacttgtccg...248...-tgtgagagactt	ctaggaat
S. Sus	ac	ccaatg	atgacctgacctgacctgctgctgatcagttaactggttaac	GCCTTTGCTTGCTGCTGT	cg	TCAGTGCAG	cgagctgaggcacttgtccg...286...-tgtgagagactt	ctaggaat
O. Avi	ac	ccaatg	atgacctgacctgacctgctgctgatcagttaactggttaac	GCCTTTGCTTGCTGCTGT	cg	TCAGTGCAG	cgagctgaggcacttgtccg...258...ctgtgagagac-t	ctaggaac
L. Afr	ac	ccaatg	atgacctgacctgacctgctgctgatcagttaactggttaac	GCCTTTGCTTGCTGCTGT	cg	TCAGcGCAG	cgagctgaggcacttgtccg...237...-tgtgagagactt	ccggagcc
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R. Mac	ac	ccaatg	atgacctgacca...159...ggtgaaagtggttctagaac	CTGCACTGAATAG	ta	GTAAGCAAta	AGGC	ccaattcatcccacagcact-----...100...-tgtgagagactt	ctaggaat
P. Tro	ac	ccaatg	atgacctgacca...162...ggtgaaagtggttctagaac	CTGCACTGAATAG	ta	GTAAGCAAta	AGGC	ccaattcatcccacagcact-----...100...-tgtgagagactt	ctaggaat
P. Abe	ac	ccaatg	atgacctgacca...163...ggtgaaagtggttctagaac	CTGCACTGAATAG	ta	GTAAGCAAta	AGGC	ccaattcatcccacagcact-----...104...-tgtgagagactt	ctaggaat
C. Jac	ac	ccaatg	atgacctgacca...160...ggtgaaagtggttctagaac	CTGCACTGAATAG	ta	GTAAGCAAta	AGGC	ccaattcatcccacagcact-----...100...-tgtgagagactt	ctaggaat
M. Mus	ac	ccaatg	atgacctgacca...149...ggtgaaagtggttctagaac	CTGCACTGAATAG	ta	GTAAGCAAta	AGGC	ccGATTcatcccacagcactgatcat...93...-tgtgagagactt	gtaggaat
R. Nor	ac	ccaatg	atgacctgacca...149...ggtgaaagtggttctagaac	CTGCACTGAATAG	ta	GTAAGCAAta	AGGC	ccGATTcatcccacagcactgatcat...93...-tgtgagagactt	gtaggaat
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C. Fam	ac	ccaatg	atgacctgacca...157...ggtgaaagtgattctagaac	CTGCACTGAATAG	ta	GTAAGCAAta	AGGC	ccaattcatcccacagcact-----...100...-tgtgagagactt	ctaggaac
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S. Sus	ac	ccaatg	atgacctgacca...194...ggtgaaagtggttctagaac	CTGCACTGAATAG	ta	GTAAGCAAta	AGGC	ccaattcatcccacagcact-----...100...-tgtgagagactt	ctaggaat
O. Avi	ac	ccaatg	atgacctgacca...167...ggtgaaagtggttctagaac	CTGCACTGAATAG	ta	GTAAGCAAta	AGGC	ccaattcatcccacagcact-----...99...ctgtgagagac-t	ctaggaac
L. Afr	ac	ccaatg	atgacctgacca...151...ggtgaaagcggttctagaac	CTGCaCTGAATAG	ta	GTAAGCAAta	AGGC	ccaactcatcccacagcact-----...94...-tgtgagagactt	ccggagcc
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id=65749 gene=ENSG00000112531 name=QKI segment=chr6_163991780_163992133_1 type=EN VIEW

Figure 371:



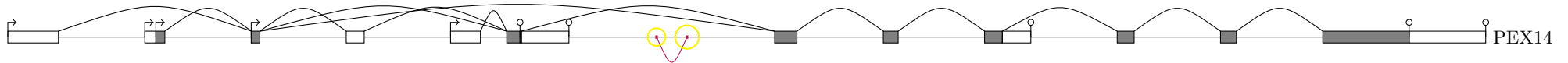
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P. Tro	ctcgttag	cgtccatttctt...300...----	gtcctgcatgcataatgaac	CGTTTACAGTGt	ATTTAAGAA	--agggaaagctgtgcctttt--	...172...tgctccatcg--gg	ga-atgaca
P. Abe	ctcgttag	cgtccatttctt...306...----	gtcctgcatgcataatgaac	CGTTTACAGTGt	ATTTAAGAA	--agggaaagctgtgcctttt--	...170...tgctccatcg--gg	ga-atgaca
C. Jac	cccgtag	cgtccatttctt...307...----	gtcctgcatgcataatgaac	CGTTTACAGTGt	ATTTAAGAA	--agggaaagctgtgcctttt--	...172...tactccgtcg--ag	ga-atggca
M. Mus	ctcgttag	tgtccatttatt...290...gagatgcccctgcatgcgtac	TGAACcGTTT	acAGTGT	ATTTAA	--gaaaggaaagctgtgcctt--	...178...gcttccatcc--gg	gatgctgc-
R. Nor	ctcgttag	tgtccatttatt...302...----	gtcctgcatgcataatgaac	CGTTTACAGTGt	ATTTAAGAGAG	--acaagctgtgcctttttt--	...173...gcttccatcc--gg	gatgctgc-
C. Por	acacttag	catccatttatt...306...gaaatgttctgcatgcataa	TGAACcGTTT	acAGTGT	ATTTAA	gaaaaagggaagctgtgcc-----	...185...acttccacca--gg	gg-gcgaca
O. Cun	ctcgttag	cgtccatttatt...310...----	gttctgcatgcataatgaac	CGTTTACAGTGt	ATTTAAGAA	--agggaaagctgtgcctttt--	...170...cgatcggtcg--gg	ga-acaaca
C. Fam	gccttag	catccgtttatt...332...----	gttctgcatgcataatgaac	CGTTTACAGTGt	ATTTAAGAA	--agggaaagctgtgcctttt--	...172...--ttcgcgtcgtcg	ga-tcgaca
F. Cat	cccttag	cgtccatttatt...324...----	gttctgcatgcataatgaac	CGTTTACAGTGt	ATTTAAGAA	--agggaaagctgtgcctttt--	...171...gcttccgtcc--gg	ga-gcgaca
E. Cab	cccttag	cgtccatttatt...312...----	gttctgcatgcataatgaac	CGTTTACAGTGt	ATTTAAGAA	--agggaaagctgtgcctttt--	...172...ccttccatcg--gg	ga-gcaaca
L. Afr	cccttag	tgtccatttatt...306...----	gttctgcatgcataatgaac	CGTTTACAGTGt	ATTTAAGAA	--agggaaagctgtgcctttt--	...180...acttccatcg--gg	ga-gcgaca
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P. Abe	ccatcggg	ga----atgacacact...1141...gattaacagcaaagc	----cata--TT	-----CTAAATt	CACTGTt	GAATG	-cctgtccc-agtccaaattgt...181...atcctttacttt	aatcacct
C. Jac	ccgtcgag	ga----atggcaggca...1144...gattaacagcaaagc	----cata--TT	-----CTAAATt	CACTGTt	GAATG	-cctgtccc-agtccaaattgt...175...atcctttacttt	aatcacct
M. Mus	ccatcggg	gatgctgctgca----...1206...-----acaaaacttcttcatataa	TTAAAa	AACTAAAT	taGTT	-----TA	aaatgaagc-aatttatact-...52...atcctttacttt	aatcacct
R. Nor	ccatcggg	gatgctgctgca----...1059...aactaaacagcaaagc	----cata--TTCT	-----CTAAATt	CACTGTt	GAATG	-cctgtccc-gggccaaactgt...174...atcctttacttt	aatcacct
C. Por	ccaccagg	gg----gagacacgccc...1246...-----acaaaacttcttcatagaa	TT--AAACACTAAAT	taGTT	-----TA	aaatgaagc-aatttatact-...52...atcctttacttt	aatcacct	
O. Cun	cggtcggg	ga----acaacactgc...1150...gattaacagcaaagc	----cata--TT	-----CTAAATt	CACTGTt	GAATG	-cctgtccc-agtccaaattgt...187...atcctttacttt	aatcacct
C. Fam	gtcgtcgg	ga----tcgacatgct...1130...gattaacagcaaagc	----cata--TT	-----CTAAATt	CACTGTt	GAATG	-cctgtccc-agtccaaattgt...182...atcctttacttt	aatcacct
F. Cat	ccgtcggg	ga----gagacaggct...1132...gattaacagcaaagc	----cata--TT	-----CTAAATt	CACTGTt	GAATG	-cctgtccc-agtccaaattgt...182...atcctttacttt	aatcacct
E. Cab	ccatcggg	ga----gcaacacgct...1137...tattaacagcaaagc	----cata--TT	-----CTAAATt	CACTGTt	GAATG	-cctgtccc-agtccaaattgt...185...atcctttacttt	aatcacct
L. Afr	ccatcggg	ga----gagcacacc...1141...gatgatgcagcaaagc	----cata--TT	-----CTAAATt	CACTGTt	GAATG	-cctgtccc-agtccaaattgt...185...atcctttacttt	aatcacct
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Figure 372:



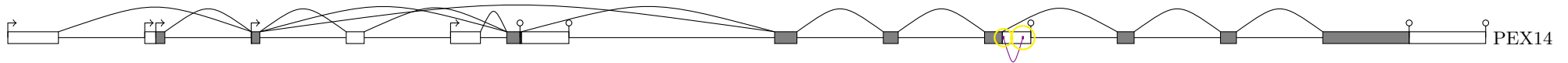
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O. Cun	agccgtt	ggctgcatctcc...4495...	atgtgtcataaaataaagca	AATTATCC	cgTCTTC	gagaacgatctagactaatt...	414...	tcttctcccag	ggctgacg
C. Fam	ggccatt	ggaggatgcctg...4491...	atgtgtcataaaataaagca	AATTATCC	cgTCTTC	gagaacgatctagactaatt...	418...	ttctccccag	ggctgaca
B. Tau	aggccag	ggagaagactgg...4491...	atgtgtcataaaataaagca	AATTATCC	cgTCTTC	gagaacgatctagactaatt...	418...	cttctccccag	ggctgaca
E. Cab	ggccact	ggataaagactgt...4493...	atgtgtcataaaataaagca	AATTATCC	cgTCTTC	gagaacgatctagactaatt...	417...	cttctcccag	ggctgacg
S. Sus	caccgtt	gaatgagactct...4491...	atgtgtcataaaataaagca	AATTATCC	cgTCTTC	gagaacgatctagactaatt...	418...	cttctccccag	ggctgaca
O. Avi	aggcctg	ggagaagaccag...4492...	atgtgtcataaaataaagca	AATTATCC	cgTCTTC	gagaacgatctagactaatt...	417...	cttctccccag	ggctgaca
L. Afr	agccatt	ggctgagactgt...4494...	atgtgtcataaaataaagca	AATTATCC	cgTCTTC	gagaacgatctagactaatt...	415...	cttctccccag	ggctgaca
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id=700324 gene=ENSG00000142655 name=PEX14 segment=chr1_10596630.10659294.1 type=IN

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R. Mac	ggccgtt	ggatgagactgt...4667...	gatggtatctgttttcgggg	GAAGAat	GGAGAATT	gcagtagcagcacttcaa...	243...	tcttctcccag	gactgaca
P. Tro	ggccatt	ggatgagactgt...4667...	gatggtatctgttttcgggg	GAAGAat	GGAGAATT	gcagtagcagcacttcaa...	243...	tcttctcccag	ggctgaca
P. Abe	ggccatt	ggatgagactgt...4667...	gatggtatctgttttcgggg	GAAGAat	GGAGAATT	gcagtagcagcacttcaa...	243...	tcttctcccag	ggctgaca
C. Jac	ggccatt	ggatgagactgt...4667...	gatggtatctgttttcgggg	GAAGAat	GGAGAATT	gcagtagcagcacttcaa...	243...	tcttctcccag	ggctgaca
M. Mus	tgccctt	gaatcacactga...4666...	gatggtatctgttttcgggg	GAAGAat	GGAGAATT	gcagtagcagcacttcaa...	244...	tcttctctctag	gactgaca
R. Nor	tgccctt	gcatcacaccga...4669...	gatggtatctgttttcgggg	GAAGAat	GGAGAATT	gcagtagcagcacttcaa...	241...	tcttctctctag	ggctgaca
C. Por	tgccctt	ggagaatgtgca...4663...	gatggtatctgttttcgggg	GAAGAat	GGAGAATT	gcagtagcagcacttcaa...	246...	tcttctctctag	ggctgact
O. Cun	agccgtt	ggctgcatctcc...4669...	gatggtatctgttttcgggg	GAAGAat	GGAGAATT	gcagtagcagcacttcaa...	241...	tcttctcccag	ggctgacg
C. Fam	ggccatt	ggaggatgcctg...4665...	gatggtatctgttttcgggg	GAAGAat	GGAGAATT	gcagtagcagcacttcaa...	245...	ttctccccag	ggctgaca
B. Tau	aggccag	ggagaagactgg...4666...	gatggtatctgttttcgggg	GAAGAat	GGAGAATT	gcagtagcagcacttcaa...	244...	cttctccccag	ggctgaca
E. Cab	ggccact	ggataaagactgt...4668...	atggtatctgttttcgggg	AAGAat	GGAGAATT	gcagtagcagcacttcaa...	243...	cttctcccag	ggctgacg
S. Sus	caccgtt	gaatgagactct...4665...	gatggtatctgttttcgggg	GAAGAat	GGAGAATT	gcagtagcagcacttcaa...	245...	cttctccccag	ggctgaca
O. Avi	aggcctg	ggagaagaccag...4666...	gatggtatctgttttcgggg	GAAGAat	GGAGAATT	gcagtagcagcacttcaa...	244...	cttctccccag	ggctgaca
L. Afr	agccatt	ggctgagactgt...4668...	gatggtatctgttttcgggg	GAAGAat	GGAGAATT	gcagtagcagcacttcaa...	242...	cttctccccag	ggctgaca
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Figure 373:



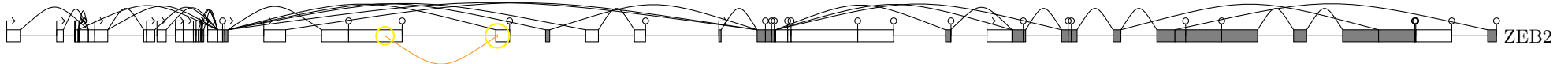
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P. Tro	-----	cCAGACAG	GTAAA	-----	gattaatgactccatcaagt...128..atttcggtttaa	tttgaaat
P. Abe	-----	cCAGACAG	GTAAA	-----	gattaatgactccatcaagt...128..atttcggtttaa	tttgaaat
C. Jac	-----	cCAGACAG	GTAAA	-----	gattaatgactccatcaagt...128..atttcggtttaa	tttgaaat
M. Mus	-----	cCAGACAG	GTAAA	-----	gattaatgactccatcaagt...123..atttcggtttaa	tttgaaat
R. Nor	-----	cCAGACAG	GTAAA	-----	gattaatgactccatcaagt...123..atttcggtttaa	tttgaaat
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O. Cun	-----	cCAGACAG	GTAAA	-----	gattaatgactccatcaagt...111..atttcggtttaa	tttgaaat
F. Cat	-----	aCAGACAG	GTAAA	-----	gattaatgactccatcaagt...125..atttcggtttaa	tttgaaat
B. Tau	-----	cCAGACAG	GTAAA	-----	gattaatgactccatcaagt...130..atttcggtttaa	tttgaaat
E. Cab	-----	aCAGACAG	GTAAA	-----	gattaatgactccatcaagt...130..atttcggtttaa	tttgaaat
S. Sus	-----	cCAGACAG	GTAAA	-----	gattaatgactccatcaagt...130..atttcggtttaa	tttgaaat
O. Avi	-----	cCAGACAG	GTAAA	-----	gattaatgactccatcaagt...130..atttcggtttaa	tttgaaat
L. Afr	ccagacaggtagagattaatgactccatcaagtcgccctcagagcctcgcctcagccccttccactgcccctccctgtaccctccatctccactttat	GTG	GTGACTTCATT	atctgctctgagaatctggt	-----...25..atttcggtttaa	tttgaaat
					*****	*****

id=700330 gene=ENSG00000142655 name=PEX14 segment=chr1_10683179_10683343.1 type=AN

H. Sap	ccagacag	gtaaagattaat...73..cactctatgtggtgacttca	TTTATCTG	TCTG	gagaatctgttcacatttgcaaatgaagccgccgtcatttcggtttaa	tttgaaat
R. Mac	ccagacag	gtaaagattaat...73..cactctatgtggtgacttca	TTTATCTG	TCTG	gagaatctgttcacatttgcaaatgaagccgccgtcatttcggtttaa	tttgaaat
P. Tro	ccagacag	gtaaagattaat...73..cactctatgtggtgacttca	TTTATCTG	TCTG	gagaatctgttcacatttgcaaatgaagccgccgtcatttcggtttaa	tttgaaat
P. Abe	ccagacag	gtaaagattaat...73..cactctatgtggtgacttca	TTTATCTG	TCTG	gagaatctgttcacatttgcaaatgaagccgccgtcatttcggtttaa	tttgaaat
C. Jac	ccagacag	gtaaagattaat...73..cactctatgtggtgacttca	TTTATCTG	TCTG	gagaatctgttcacatttgcaaatgaagccgccgtcatttcggtttaa	tttgaaat
M. Mus	ccagacag	gtaaagattaat...68..tccactctgtggtgacttca	TTTATCTG	TCTG	gagaatctgttcacatttgcaaatgaagccgccgtcatttcggtttaa	tttgaaat
R. Nor	ccagacag	gtaaagattaat...68..tccactctgtggtgacttca	TTTATCTG	TCTG	gagaatctgttcacatttgcaaatgaagccgccgtcatttcggtttaa	tttgaaat
C. Por	ccagacag	gtaaagattaat...67..cactttacgtggtgacttca	TTTATCTG	TCTG	gagaatctgttcacatttgcaaatgaagccgccgtcatttcggtttaa	tttgaaat
O. Cun	ccagacag	gtaaagattaat...56..cactttatgtggtgacttca	TTTATCTG	TCTG	gagaatctgttcacatttgcaaatgaagccgccgtcatttcggtttaa	tttgaaat
F. Cat	acagacag	gtaaagattaat...70..cactttatgtggtgacttca	TTTATCTG	TCTG	gagaatctgttcacatttgcaaatgaagccgccgtcatttcggtttaa	tttgaaat
B. Tau	ccagacag	gtaaagattaat...75..cactttatgtggtgacttca	TTTATCTG	TCTG	gagaatctgttcacatttgcaaatgaagccgccgtcatttcggtttaa	tttgaaat
E. Cab	acagacag	gtaaagattaat...75..cactttatgtggtgacttca	TTTATCTG	TCTG	gagaatctgttcacatttgcaaatgaagccgccgtcatttcggtttaa	tttgaaat
S. Sus	ccagacag	gtaaagattaat...75..cactttatgtggtgacttca	TTTATCTG	TCTG	gagaatctgttcacatttgcaaatgaagccgccgtcatttcggtttaa	tttgaaat
O. Avi	ccagacag	gtaaagattaat...75..cactttatgtggtgacttca	TTTATCTG	TCTG	gagaatctgttcacatttgcaaatgaagccgccgtcatttcggtttaa	tttgaaat
L. Afr	ccagacag	gtagagattaat...103..gagaatctgttcacatttgcaaatgaagccgccgtcatttcggtttaa	AAATGAAG	CGCCGT	-----catttcggtttaa	tttgaaat
	*****	*** *****			*****	*****

id=700330 gene=ENSG00000142655 name=PEX14 segment=chr1_10683179_10683343.1 type=AN VIEW

Figure 374:



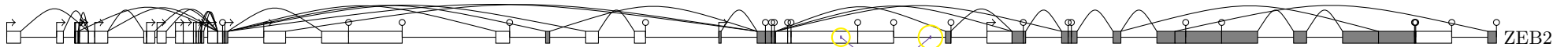
H. Sap	cagagttt	ccactaaagggt...1748...ttatgccaacagc---atcagct-	TACCAcTTGAAAA	-----tctattgaatgactatttgg...208...atttcattttaa	ggtgttct
R. Mac	cggagttt	ccactaaagggt...1745...ttatgccaacagc---atcagct-	TACCAcTTGAAAA	-----tctattgaatgactatttgg...208...atttcgttttaa	ggtgttct
P. Tro	cagagttt	ccactaaagggt...1750...ttatgccaacagc---atcagct-	TACCAcTTGAAAA	-----tctattgaatgactatttgg...208...atttcgttttaa	ggtgttct
P. Abe	tccagttt	ccactaaagggt...1749...ttatgccaacagc---atcagct-	TACCAcTTGAAAA	-----tctattgaatgactatttgg...208...atttcgttttaa	ggtattct
C. Jac	cagagttt	ccactaaagggt...1753...ttatgccaacagc---atcagct-	TACCAcTTGAAAA	-----tctattgaatgactatttgg...208...atttcattttaa	ggtgttct
M. Mus	caaagttt	ctgctaaagggt...1789...ttgtgccaacatc---atcagct-	TACCAcTTGAAAA	-----aacctattgaatgactgttt...203...atttcattttaa	gatgttct
R. Nor	caaagttt	ctgctcaagggt...1757...ttggccaaccac---atcaggt-	TACCAcTTGGAAAA	-----tctactgaatgactatttgg...200...atttcattttaa	gatgttct
C. Por	caaagttt	ctgcttaagagt...1721...ttatgccaacagc---atcagtt-	TACCAcTTGAAAA	-----tctattgaatgactatttgg...206...atttccttttaa	ggtgttct
O. Cun	caaagttt	ctgctgaagggt...1971...--tccaggtacttttatcttgc	GTGACAGTTGTGTcGAGT	gaaagctctcaggaaaagtg...28...atttcattttaa	ggtgttct
C. Fam	cctacctt	tcgctaagaaga...1854...ttataccaacagc---atcagct-	TACCAcTTGAAAA	-----tctattgaatgactcttttgg...220...atttcgttttaa	ggtgttct
F. Cat	caaacttt	cagttaaagggt...1785...ttataccaacagc---atcagct-	TACCAcTTGAAAA	-----cctattgaatgactatttgg...206...atttcgttttaa	ggtgttct
B. Tau	caaagttt	cagctaaagcat...1793...ttatgccaacagc---atcagct-	TACCAcTTGAAAA	-----aaaatctcttgaatgactat...213...atthtgttttaa	ggtgttct
E. Cab	caaagttt	cagttaaagggt...1773...ttatgccaacacc---atcagct-	TACCAcTTGAAAA	-----tctattgaatgactatttgg...208...atttcgttttaa	ggtgttct
O. Avi	caaagttt	cagctaaagcat...1789...ttatgccaacagc---atcagct-	TACCAcTTGAAAA	-----aaaaaatctct---tgactat...220...atthtgttttaa	ggtgttct
L. Afr	caaagttt	cggtaaagggt...1941...--tgccaaatacttttatcttgc	GGTGACAGTcGTGTCAG	actgaaag--ctcaggaaaagt-----...29...atttcgttttaa	ggtgttct
		* **	* *	*** * *** * ** * *	* * **

id=34073 gene=ENSG00000169554 name=ZEB2 segment=chr2.145268956.145270989_-1 type=AN

H. Sap	tctcgcag	a-gggtacc-----	TTTTcCCGATGGTG	--caaatc--gacttgacataac...139...cagcagcagagt	gaaagaca
R. Mac	tctcgcag	a-gggtacc-----	TTTTcCCGATGGTG	--caaatc--gacttgacataac...139...cagcagcagagt	gaaagaca
P. Tro	tctcgcag	a-gggtacc-----	TTTTcCCGATGGTG	--caaatc--gacttgacataac...139...cagcagcagagt	gaaagaca
P. Abe	tctcgcag	a-gggtacc-----	TTTTcCCGATGGTG	--caaatc--gacttgacataac...139...cagcagcagagt	gaaagaca
C. Jac	tctcgcag	a-gggtacc-----	TTTTcCCGATGGTG	--caaatc--gacttgacataac...139...cagcagcagagt	gaaagaca
M. Mus	tctcacag	a-gggtacc-----	TTTTcCCGATGGTG	--caaatc--gacttgacataac...139...cagcagccgagt	ctgacaga
R. Nor	tctcacag	a-gggtacc-----	TTTTcCCGATGGTG	--caaatc--gacttgacataac...139...cagcagccgagt	ctgacaga
C. Por	tctcgcag	a-gggtacc-----	TTTTcCCGATGGTG	--caaatc--gacttgacataac...139...cagcagcagagt	gaaagaca
O. Cun	tctcgcag	a-gggtaccctttcccgatggtgcaaatcg	ACTTGACATAACTGtTCAT	cagtttcagggtttccctg...112...cagccgcccagt	gaaagaca
C. Fam	tctctcag	a-gggtacc-----	TTTTcCCGATGGTG	--caaatc--gacttgacataac...141...cagtagcagagt	gaaagact
F. Cat	tctctcag	a-gggtacc-----	TTTTcCCGATGGTG	--caaatc--gacttgacataac...139...cagtagcagagt	gaaagacg
B. Tau	tctcgcag	a-gggtacc-----	TTTTcCCGATGGTG	--caaatc--gacttgacataac...139...cagtaacagagt	gaaagaca
E. Cab	tctcgcag	agggtacc-----	TTTTcCCGATGGTG	--caaatc--gacttgacataac...139...cagtagcagagt	gagagaca
O. Avi	tctcgcag	a-gggtacc-----	TTTTcCCGATGGTG	--caaatc--gacttgacataac...139...cagtagcagagt	gaaagaca
L. Afr	tctcgcag	a-gggtaccctttcccgatggtgcaaatcg	TTGACATaACTGtTCATC	agtttcagggtttccctg...111...cagtagcagagt	gaaagaca
		**** **	* **	** * * ** * * * * *	*** * **** * *

id=34075 gene=ENSG00000169554 name=ZEB2 segment=chr2.145262008.145262200_-1 type=AN VIEW

Figure 375:



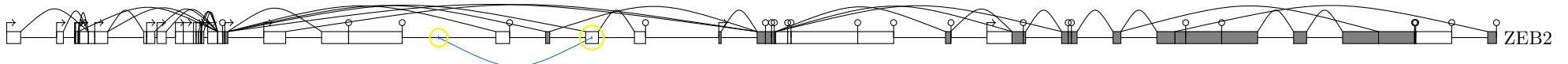
H. Sap	ttatattt	cagttttgatgc...1225...agagccaatgattcttggga	GCAGTGTG ac	AGAAACAGAGTGT ggcgagaactcatgtaagac...197...aaaagttaatt	taaaaaat-
R. Mac	ttatattt	cagttttgatgc...1226...agagccaatgattcttggga	GCAGTGTG ac	AGAAACAGAGTGT ggcgagaactcatgtaagac...197...aaaagttaatt	aaaaaaaa-
P. Tro	ttatattt	cagttttgatgc...1226...agagccaatgattcttggga	GCAGTGTG ac	AGAAACAGAGTGT ggcgagaactcatgtaagac...198...aaaagttaatt	-aaaaaaaa
P. Abe	ttatattt	cagttttgatgc...1227...agagccaatgattcttggga	GCAGTGTG ac	AGAAACAGAGTGT ggcgagaactcatgtaagac...197...aaaagttaatt	-aaaaaaaa
C. Jac	ttatattt	cagttttgatgc...1225...agagccaatgattcttggga	GCAGTGTG ac	AGAAACAGAGTGT ggcgagaactcatgtaagac...198...-aaagttaatt	aaaaaaaaat
M. Mus	ttgtgtat	tggtttcaacc...1453...agagccaatgattcttggga	GCAGTGTG ac	AGAAACAGAGTGT ggcgagaactcatgtaagac...197...aaaagttaatt	aaaaaaaaag-
C. Por	ttatattt	caattttgacgc...1140...agagccaatgattcttggga	GCAGTGTG ac	AGAAACAGAGTGT ggcgagaactcatgtaagac...198...aaaagttaatt	taaaaaaaa-
O. Cun	ttatattt	cagttttgatgc...1204...agagccaatgattcttggga	GCAGTGTG ac	AGAAACAGAGTGT ggcgagaactcatgtaagac...197...aaaagttaata	taaaaaat-
C. Fam	tggtgttt	cagtctgggcg...1206...agagccaatgattcttggga	GCAGTGTG ac	AGAAACAGAGTGT ggcgagaactcatgtaagac...202...aaaagttaatt	ttaaaaac-
B. Tau	ttatattt	ccatttgaggc...1238...agagccaatgattcttggga	GCAGTGTG ac	AGAAACAGAGTGT ggcgagaactcatgtaagac...198...aaaagttaatt	ttaaaaaa-
E. Cab	ttatgttt	cggtttgatga...1240...agagccaatgattcttggga	GCAGTGTG ac	AGAAACAGAGTGT ggcgagaactcatgtaagac...197...aaaagttaatt	ttaaaaaa-
O. Avi	ttatgttt	ccatttgatgc...1234...agagccaatgattcttggga	GCAGTGTG ac	AGAAACAGAGTGT ggcgagaactcatgtaagac...199...aaaagttaatt	ttaaaaaa-
L. Afr	tcatattt	tggtttcatga...1238...agagccaatgattcttggga	GCAGTGTG ac	AGAAACAGAGTGT ggcgagaactcatgtaagac...201...aaaagttaatt	tgaaaaaa-
	* * * *	* *	*****	*****	****

id=34091 gene=ENSG00000169554 name=ZEB2 segment=chr2.145185614.145187122.-1 type=AN

H. Sap	aagaaaaa	gattgatgctca-...1676...ccttcatttgctccaataa	GCACT t	CTGTTTTTCAC Agc	TTGC agtaatgcttaaagtaata...173...tttccccacag	aagaaatg
R. Mac	cagaaaaa	gattgatgctca-...1680...ccttcatttgctccaataa	GCACT t	CTGTTTTTCAC Agc	TTGC agtaatgcttaaagtaata...173...tttccccacag	aagaaatg
P. Tro	aagaaaaa	gattgatgctca-...1677...ccttcatttgctccaataa	GCACT t	CTGTTTTTCAC Agc	TTGC agtaatgcttaaagtaata...173...tttccccacag	aagaaatg
P. Abe	aagaaaaa	gattgatgctca-...1678...ccttcatttgctccaataa	GCACT t	CTGTTTTTCAC Agc	TTGC agtaatgcttaaagtaata...173...tttccccacag	aagaaatg
C. Jac	aagaaaaa	gattgatgctca-...1648...ccttcatttgctccaataa	GCACT t	CTGTTTTTCAC Agc	TTGC agtaatgcttaaagtaata...173...tttccccacag	aagaaatg
M. Mus	acaaaaat	ggccgg-gctcag...1831...ccttcatttgctccaataa	GCAC c	TCTGTTTTTCAC Agc	TTGC agtaacgcttaaagtaata...170...tttccccacag	aagaaatg
C. Por	aagaaaaa	ggttgaagctaa-...1649...ccttcatttgctccaataa	GCAC c	TCTGTTTTTCAC Agc	TTGC agtaatgcttaaagtaata...173...tttccccacag	aagaaatg
O. Cun	aaaaaaga	gcttgatgctca-...1667...ccttcatttgctccaataa	GCAC c	TCTGTTTTTCAC Agc	TTGC agtaatgcttaaagtaata...171...tttccccacag	aagaaatg
C. Fam	aaagaaaa	ggtcggcgcctca-...1710...ccttcatttgctccaataa	GCAC c	TCTGTTTTTCAC Agc	TTGC agtaatgcttaaagtaata...173...tttccccacag	aagaaatg
B. Tau	cacaaaaa	gcttgatgctca-...1659...ccttcatttgctccaataa	GCAC c	TCTGTTTTTCAC Agc	TTGC agtaatgcttaaagtaata...173...tttccccacag	aagaaatg
E. Cab	aagaaaaa	ggttgatgttca-...1678...ccttcatttgctccaataa	GCAC c	TCTGTTTTTCAC Agc	TTGC agtaatgcttaaagtaata...172...tttccccacag	aagaaatg
O. Avi	aacaaaaa	gcttgatgctca-...1655...ccttcatttgctccaataa	GCAC c	TCTGTTTTTCAC Agc	TTGC agtaatgcttaaagtaata...173...tttccccacag	aagaaatg
L. Afr	gagaaaaa	ggttgctattca-...1674...ccttcatttgctccaataa	GCAC c	TCTGTTTTTCAC Agc	TTGC agtaatgcttaaagtaata...175...tctccccacag	aagaaatg
	*	* * * *	* * * *	*****	*****	* * * * *

id=34093 gene=ENSG00000169554 name=ZEB2 segment=chr2.145182435.145184371.-1 type=IN VIEW

Figure 376:



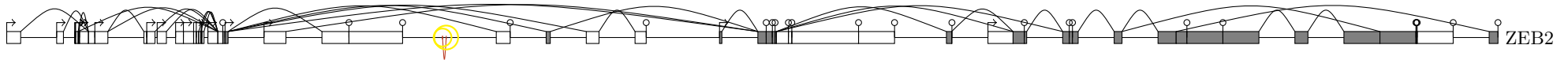
H.Sap	cattttaa	ggtgttctgtag...4643...cgattattgcactttatggt	TTAGTGGAT	TTTG	TGTT	gctagttacagcaacactta...263...ttttctcgag	aggttacc
R.Mac	cgttttaa	ggtgttctgtag...4643...cgattattgcactttatggt	TTAGTGGAT	TTTG	TGTT	gctagttacagcaacactta...263...ttttctcgag	aggttacc
P.Tro	cgttttaa	ggtgttctgtag...4643...cgattattgcactttatggt	TTAGTGGAT	TTTG	TGTT	gctagttacagcaacactta...263...ttttctcgag	aggttacc
P.Abe	cgttttaa	ggttattctgtag...4643...cgattattgcactttatggt	TTAGTGGAT	TTTG	TGTT	gctagttacagcaacactta...263...ttttctcgag	aggttacc
C.Jac	cattttaa	ggtgttctgtag...4642...cgattattgcactttatggt	TTAGTGGAT	TTTG	TGTT	gctagttacagcaacactta...264...ttttctcgag	aggttacc
M.Mus	cattttaa	gatgttctgttc...4640...cgattattgcactttatggt	TTAGTGGAT	TTTG	TGTT	gctagttacagcaacactta...266...ttttctcacag	aggttacc
C.Por	ctttttaa	ggtgttctgtgc...4641...cgattattgcactttatggt	TTAGTGGAT	TTTG	TGTT	gctagttacagcaacactta...265...ttttctcgag	aggttacc
O.Cun	cattttaa	ggtgttctgtac...4643...cgattattgcactttatggt	TTAGTGGAT	TTTG	TGTT	gctagttacagcaacactta...263...ttttctcgag	aggttacc
C.Fam	cgttttaa	ggtgttctgtac...4643...cgattattgcactttatggt	TTAGTGGAT	TTTG	TGTT	ctgttgctagttacagcaac-----268...ttttctctcag	aggttacc
B.Tau	tgttttaa	ggtgttctgtac...4643...cgattattgcactttatggt	TTAGTGGAT	TTTG	TGTT	gctagttacagcaacactta...263...ttttctcgag	aggttacc
E.Cab	cgttttaa	ggtgttctgtac...4605...cgattattgcactttatggt	TTAGTGGAT	TTTG	TGTT	gctagttacagcaacactta...301...ttttctcgag	agggttac
O.Avi	tgttttaa	ggtgttctgtac...4643...cgattattgcactttatggt	TTAGTGGAT	TTTG	TGTT	gctagttacagcaacactta...263...ttttctcgag	aggttacc
L.Afr	cgttttaa	ggtgttctgcac...4643...cgattattgcactttatggt	TTAGTGGAT	TTTG	TATT	gctagttacagcaacactta...263...ttttctcgag	aggttacc
	*****	* * *****	*****	*****	*****	*****	*** * *

id=34074 gene=ENSG00000169554 name=ZEB2 segment=chr2.145262201.145268955_-1 type=IN

H.Sap	at ttgtag	caaagacaaacc...32...----caacattaaaagggag-agag	GATGc	CAAGa	ATCCc	ATTAA	tttgggatataagtgtctga...61...aaggatagagag	gtaaggca
R.Mac	at ttgtag	caaagacaaacc...32...----caacattaaaagggag-agag	GATGc	CAAGa	ATCCc	ATTAA	tttgggatataagtgtctga...61...aaggatagagag	gtaaggca
P.Tro	at ttgtag	caaagacaaacc...32...----caacattaaaagggag-agag	GATGc	CAAGa	ATCCc	ATTAA	tttgggatataagtgtctga...61...aaggatagagag	gtaaggca
P.Abe	at ttgtag	caaagacaaacc...32...----caacattaaaagggag-agag	GATGc	CAAGa	ATCCc	ATTAA	tttgggatataagtgtctga...61...aaggatagagag	gtaaggca
C.Jac	at ttgtag	caaagacaaacc...32...----caacattaaaagggag-agag	GATGc	CAAGa	ATCCc	ATTAA	tttgggatataagtgtctga...61...aaggatagagag	gtaaggca
M.Mus	at ttgtag	taaaggcaagcc...32...----caacattaaaaccgag-agag	AATGc	CAAGC	ATCCc	ATTAA	tttgggatataactgcctca...58...taggacacagag	gtaaggca
C.Por	tattttag	caaagacaaacc...33...----aacattaaaaggggagag	GATGc	CAAGa	ATCCc	ATTAA	tttgggatataagtaccta...62...aaagataaagag	gtaaggca
O.Cun	at ttgtag	caaagacaaacc...32...----caacattaaaagggag-agag	GATGc	CAAGa	ATCCc	ATTAA	tttgggatataagtgccta...61...aaggatagagag	gtaaggca
C.Fam	at ttgtag	ccgagacaaacc...37...-----ttaaagggag-agaggagg	CAAGa	ATCCc	GTTAA	tttgggatataagtgccta...61...caagatgagag	gtgaggcg	
B.Tau	at tcatag	caaagacaaatc...32...----caacattaaaagggag-agag	GATGc	CAAGa	ATCCc	ATTAA	tttgggatataaggtgcctaa...61...aaggatagagag	gtaaggca
E.Cab	at ttgtag	caaagacaaacc...28...agtgcacattaaagagagag	GACGc	CAAGa	ATCCc	ATTAA	tttgggatataagtgacctga...61...aaggatgggag	gtaagaaa
O.Avi	at ttgtag	caaagacgaatc...32...----caacattaaaaggggag-agag	GACGc	CAAGa	ATCCc	ATTAA	tttgggatataaggtgcctaa...61...aaggatagagag	gtaaggca
L.Afr	at ttgtag	caaaggcaaac...32...----caacattaaaaggggag-agag	GATGc	CAAGa	ATCCc	ATTAA	tttgggatataagtgccta...61...aaggatagagag	gtaaggca
	* **	** * * *	**** * * *	* *****	*****	*****	* * *	* ** **

id=34079 gene=ENSG00000169554 name=ZEB2 segment=chr2.145221733.145221909_-1 type=AN VIEW

Figure 377:



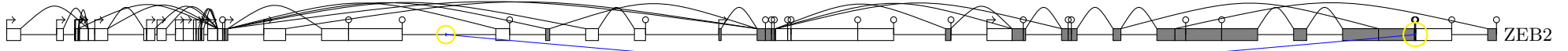
H.Sap	catttttaa	ggtgttctgtag...4689...	acagcaacacttatcataag	ACAGcAAGAAAAgaGTAG	-tccttggaattaaagtaat...218...	tttttctcgag	aggttacc
R.Mac	cgtttttaa	ggtgttctgtag...4689...	acagcaacacttatcataag	ACAGcAAGAAAAgaGTAG	-tccttggaattaaagtaat...218...	tttttctcgag	aggttacc
P.Tro	cgtttttaa	ggtgttctgtag...4689...	acagcaacacttatcataag	ACAGcAAGAAAAgaGTAG	-tccttggaattaaagtaat...218...	tttttctcgag	aggttacc
P.Abe	cgtttttaa	ggtgttctgtag...4689...	acagcaacacttatcataag	ACAGcAAGAAAAgaGTAG	-tccttggaattaaagtaat...218...	tttttctcgag	aggttacc
C.Jac	catttttaa	ggtgttctgtag...4688...	acagcaacacttatcataag	ACAGcAAGAAAAgaGTAG	-tcactggtaattaaagtaat...219...	tttttctcgag	aggttacc
M.Mus	catttttaa	gatgttctgttc...4686...	acagcaacacttatcataag	ACAGcAAGAAAGgaGTAG	-tccttggaattaaagtaat...221...	tttttctcacag	aggttacc
C.Por	cttttttaa	ggtgttctgtgc...4687...	acagcaacacttatcataag	ACAGcAAGAAAAgaGTAG	-tccttggaattaaagtaat...220...	tttttctcgag	aggttacc
O.Cun	catttttaa	ggtgttctgtac...4689...	acagcaacacttatcataag	ACAGcAAGAAAAgaGTAG	-tccttggaattaaagtaat...218...	tttttctcgag	aggttacc
C.Fam	cgtttttaa	ggtgttctgtac...4689...	acagcaacacttatcataag	ACAGcAAGAAAAgaGTAG	-tccttggaattaaagtaat...218...	tttttctctcag	aggttacc
B.Tau	tgtttttaa	ggtgttctgtac...4689...	acagcaacacttatcataag	ACAGcAAGAAAAgaGTAG	-tccttggaattaaagtaat...218...	tttttctcgag	aggttacc
E.Cab	cgtttttaa	ggtgttctgtac...4651...	acagcaacacttatcataag	ACAGcAAGAAAAgaGTAG	-tccttggaattaaaggaa...256...	tttttctcgag	aggtttac
O.Avi	tgtttttaa	ggtgttctgtac...4689...	acagcaacacttatcataag	ACAGcAAGAAAAgaGTAG	-tccttggaattaaagtaat...218...	tttttctcgag	aggttacc
L.Afr	cgtttttaa	ggtgttctgtac...4689...	acagcaacacttatcataag	ACAGcAAGAAAAgaGTAG	-tccttggaattaaagtaat...218...	tttttctcgag	aggttacc
	*****	* * *****		*****	* ***** **	***** **	*** * *

id=34074 gene=ENSG00000169554 name=ZEB2 segment=chr2.145262201.145268955_-1 type=IN

H.Sap	catttttaa	ggtgttctgtag...4743...	taatgaaatattcatttact	CTACcTTTTCTGT	agtctcacaattaggctgc...169...	tttttctcgag	aggttacc
R.Mac	cgtttttaa	ggtgttctgtag...4743...	taatgaaatattcatttact	CTACcTTTTCTGT	agtctcacaattaggctgc...169...	tttttctcgag	aggttacc
P.Tro	cgtttttaa	ggtgttctgtag...4743...	taatgaaatattcatttact	CTACcTTTTCTGT	agtctcacaattaggctgc...169...	tttttctcgag	aggttacc
P.Abe	cgtttttaa	ggtgttctgtag...4743...	taatgaaatattcatttact	CTACcTTTTCTGT	agtctcacaattaggctgc...169...	tttttctcgag	aggttacc
C.Jac	catttttaa	ggtgttctgtag...4742...	taatgaaatattcatttact	CTACcTTTTCTGT	agtctcacaattaggctgc...170...	tttttctcgag	aggttacc
M.Mus	catttttaa	gatgttctgttc...4740...	taatgaaatattcatttact	CTACcTTTTCTGT	agtctcacaattaggctgc...172...	tttttctcacag	aggttacc
C.Por	cttttttaa	ggtgttctgtgc...4741...	taatgaaatattcatttact	CTACcTTTTCTGT	agtctcacaattaggctgc...171...	tttttctcgag	aggttacc
O.Cun	catttttaa	ggtgttctgtac...4743...	taatgaaatattcatttact	CTACcTTTTCTGT	agtctcacaattaggctgc...169...	tttttctcgag	aggttacc
C.Fam	cgtttttaa	ggtgttctgtac...4743...	taatgaaatattcatttact	CTACcTTTTCTGT	agtctcacaattaggctgc...169...	tttttctctcag	aggttacc
B.Tau	tgtttttaa	ggtgttctgtac...4743...	taatgaaatattcatttact	CTACcTTTTCTGT	agtctcacaattaggctgc...169...	tttttctcgag	aggttacc
E.Cab	cgtttttaa	ggtgttctgtac...4705...	ggaatgaaatattcatttact	CTACcTTTTCTGT	agtctcacaattaggctgc...207...	tttttctcgag	aggtttac
O.Avi	tgtttttaa	ggtgttctgtac...4743...	taatgaaatattcatttact	CTACcTTTTCTGT	agtctcacaattaggctgc...169...	tttttctcgag	aggttacc
L.Afr	cgtttttaa	ggtgttctgtac...4743...	taatgaaatattcatttact	CTACcTTTTCTGT	agtctcacaattaggctgc...169...	tttttctcgag	aggttacc
	*****	* * *****	*	*****	*****	***** **	*** * *

id=34074 gene=ENSG00000169554 name=ZEB2 segment=chr2.145262201.145268955_-1 type=IN VIEW

Figure 378:



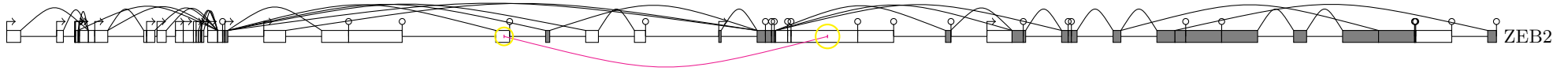
H.Sap	cattttaa	ggtgttctgtag...4743...taatgaaatattcatttact	CTAC	TTTTCT	TAGT	ctcacaaattaggctgctac...166...tttttctcgcag	aggttacc
R.Mac	cgttttaa	ggtgttctgtag...4743...taatgaaatattcatttact	CTAC	TTTTCT	TAGT	ctcacaaattaggctgctac...166...tttttctcgcag	aggttacc
P.Tro	cgttttaa	ggtgttctgtag...4743...taatgaaatattcatttact	CTAC	TTTTCT	TAGT	ctcacaaattaggctgctac...166...tttttctcgcag	aggttacc
P.Abe	cgttttaa	ggtattctgtag...4743...taatgaaatattcatttact	CTAC	TTTTCT	TAGT	ctcacaaattaggctgctac...166...tttttctcgcag	aggttacc
C.Jac	cattttaa	ggtgttctgtag...4742...taatgaaatattcatttact	CTAC	TTTTCT	TAGT	ctcacaaattaggctgctac...167...tttttctcgcag	aggttacc
M.Mus	cattttaa	gatgttctgttc...4740...taatgaaatattcatttact	CTAC	TTTTCT	TAGT	ctcacaaattaggctgctac...169...tttttctcacag	aggttacc
C.Por	ctttttaa	ggtgttctgtgc...4741...taatgaaatattcatttact	CTAC	TTTTCT	TAGT	ctcacaaattaggctgctac...168...tttttctcgcag	aggttacc
O.Cun	cattttaa	ggtgttctgtac...4743...taatgaaatattcatttact	CTAC	TTTTCT	TAGT	ctcacaaattaggctgctac...166...tttttctcgcag	aggttacc
C.Fam	cgttttaa	ggtgttctgtac...4743...taatgaaatattcatttact	CTAC	TTTTCT	TAGT	ctcacaaattaggctgctac...166...tttttctctcag	aggttacc
B.Tau	tgttttaa	ggtgttctgtac...4743...taatgaaatattcatttact	CTAC	TTTTCT	TAGT	ctcacaaattaggctgctac...166...tttttctcgcag	aggttacc
E.Cab	cgttttaa	ggtgttctgtac...4705...ggaatgaaatattcatttact	CTAC	TTTTCT	TAGT	ctcacaaattaggctgctac...204...tttttctcgcag	agggttac
O.Avi	tgttttaa	ggtgttctgtac...4743...taatgaaatattcatttct	CTAC	TTTTCT	TAGT	ctcacaaattaggctgctac...166...tttttctcgcag	aggttacc
L.Afr	cgttttaa	ggtgttctgcac...4743...taatgaaatattcatttact	CTAC	TTTTCT	TAGT	ctcacaaattaggctgctac...166...tttttctcgcag	aggttacc
	*****	* * * * *		*****	*****	*****	*** * *

id=34074 gene=ENSG00000169554 name=ZEB2 segment=chr2.145262201.145268955_-1 type=IN

H.Sap	aCT	AAGAA	tGTAG	ttaatga	gttctgta
R.Mac	aCT	AAGAA	tGTAG	ttaatga	gttctgta
P.Tro	aCT	AAGAA	tGTAG	ttaatga	gttctgta
P.Abe	aCT	AAGAA	tGTAG	ttaatga	gttctgta
C.Jac	aCT	AAGAA	tGTAG	ttaatga	gttctgta
M.Mus	aCT	AAGAA	tGTAG	ttaatga	gttctgta
C.Por	aCT	AAGAA	tGTAG	ttaatga	gttctgta
O.Cun	aCT	AAGAA	tGTAG	ttaatga	gttctgta
C.Fam	aCT	AAGAA	tGTAG	ttaatga	gttctgta
B.Tau	aCT	AAGAA	tGTAG	ttaatga	gttctgta
E.Cab	aCT	AAGAA	tGTAG	ttaatga	gttctgta
O.Avi	aCT	AAGAA	tGTAG	ttaatga	gttctgta
L.Afr	aCT	AAGAA	tGTAG	ttaatga	gttctgta
	***	*****	*****	*****	*****

id=34117 gene=ENSG00000169554 name=ZEB2 segment=chr2.145145568.145145579_-1 type=AN VIEW

Figure 381:



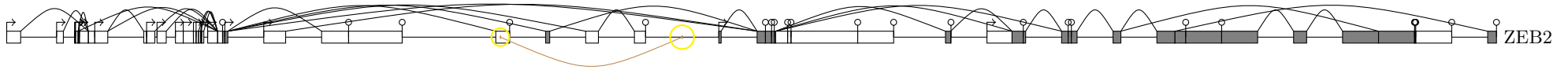
H. Sap	tctcgcag	a-ggttacctttt...68...atcaaatcagcccagtc	caag	CTTCAAGTTGAAATTTGG	ca	GGCC	agaaactcacagggtagaga...38...cagcagcagagt	gaaagaca
R. Mac	tctcgcag	a-ggttacctttt...68...atcaaatcagcccagtc	caag	CTTCAAGTTGAAATTTGG	ca	GGCC	agaaactcacagggtagaga...38...cagcagcagagt	gaaagaca
P. Tro	tctcgcag	a-ggttacctttt...68...gtcaaatcagcccagtc	caag	CTTCAAGTTGAAATTTGG	ca	GGCC	agaaactcacagggtagaga...38...cagcagcagagt	gaaagaca
P. Abe	tctcgcag	a-ggttacctttt...68...atcaaatcagcccagtc	caag	CTTCAAGTTGAAATTTGG	ca	GGCC	agaaactcacagggtagaga...38...cagcagcagagt	gaaagaca
C. Jac	tctcgcag	a-ggttacctttt...68...atcaaatcagcccagtc	caag	CTTCAAGTTGAAATTTGG	ca	GGCC	agaaactcacagggtagaga...38...cagcagcagagt	gaaagaca
M. Mus	tctcagag	a-ggttacctttt...68...atcaaatcagcccagtc	caag	CTTCAAGTTGAAATTTGG	ca	GGCC	agaaactcacagggtagaga...38...cagcagccgagt	ctgacaga
C. Por	tctcgcag	a-ggttacctttt...68...atcaaatcagcccagtc	caag	CTTCAAGTTGAAATTTGG	ca	GGCC	agaaactcacagagtagaga...38...cagcagcagagt	gaaagaca
O. Cun	tctcgcag	a-ggttacctttt...68...atcaaatcagcccagtc	caag	CTTCAAGTTGAAATTTGG	ca	GGCC	agaaactcacagggtagaga...38...cagccgccgagt	gaaagaca
C. Fam	tctctcag	a-ggttacctttt...68...atcaaatcagcccagtc	caag	CTTCAAGTTGAAATTTGG	ca	GGCC	agaaactgacagggtagaga...40...cagtagcagagt	gaaagact
B. Tau	tctcgcag	a-ggttacctttt...68...atcaaatcagcccagtc	caag	CTTCAAGTTGAAATTTGG	ca	GGCC	agaaactgacagggtagaga...38...cagtaacagagt	gaaagaca
E. Cab	agggttacctttt...69...atcaaatcagcccagtc	caag	CTTCAAGTTGAAATTTGG	ca	GGCC	agaaactgacagggtagaga...38...cagtagcagagt	gagagaca	
O. Avi	tctcgcag	a-ggttacctttt...68...atcaaatcagcccagtc	caag	CTTCAAGTTGAAATTTGG	ca	GGCC	agaaactgacagggtagaga...38...cagtagcagagt	gaaagaca
L. Afr	tctcgcag	a-ggttacctttt...68...atcaaatcagcccagtc	caag	CTTCAAGTTGAAATTTGG	ca	GGCC	agaaactgacagggcagaga...38...cagtagcagagt	gaaagaca
		**** **	*	*****			***** ** * **	**

id=34075 gene=ENSG00000169554 name=ZEB2 segment=chr2.145262008.145262200_-1 type=AN

H. Sap	ttatattt	cagttttgatgc...1035...ttatattcattaagccttaa	GGTTTTAGATTTTCAACT	ATGAGG	gagaactcagccaagatgc...386...aaaagttaatt	taaaaaat-
R. Mac	ttatattt	cagttttgatgc...1036...ttatattcattaagacttaa	GGTTTCAGATTTTCAACT	ATGAGG	gagaactcagccaagatgc...386...aaaagttaatt	aaaaaaaa-
P. Tro	ttatattt	cagttttgatgc...1036...ttatattcattaagacttaa	GGTTTTAGATTTTCAACT	ATGAGG	gagaactcagccaagatgc...387...aaaagttaatt	-aaaaaaaa
P. Abe	ttatattt	cagttttgatgc...1037...ttacatcattaagacttaa	GGTTTTAGATTTTCAACT	ATGAGG	gagaactcagccaagatgc...386...aaaagttaatt	-aaaaaaaa
C. Jac	ttatattt	cagttttgatgc...1035...ttatattcattaagacttaa	GGTTTTAGATTTTCAACT	ATGAGG	gagaactcagccaagatgc...387...-aaagttaatt	aaaaaaaa
M. Mus	ttgtgtat	tggtttcaacc...1263...ttacatcattaagacttaa	GGTTTTAGATTTTCAACT	ATGAGG	gagaactcagccaagatgc...386...aaaagttaatt	aaaaaaaa
C. Por	ttatattt	caatthttgacgc...950...ttatattcattaagacttaa	GGTTTTAGATTTTCAACT	ATGAGG	gagaactcagccaagatgc...387...aaaagttaatt	aaaaaaaa
O. Cun	ttatattt	cagttttgatgc...1014...ttatattcattaagacttag	GGTTTTAGATTTTCAACT	ATGAGG	gagaactcagccaagatgc...386...aaaagttaata	taaaaaat-
C. Fam	tggtgttt	cagctctgggccc...1016...ttatattcattaagacttaa	GGTTTTAGATTTTCAACT	ATGAGG	gagaactcagccaagatgc...391...aaaagttaatt	ttaaaaa-
B. Tau	ttatattt	ccatttggagcc...1048...ttctattcattaagacttaa	GGTTTTAGATTTTCAACT	ATGAGG	gagaactcagccaagatgc...387...aaaagttaatt	ttaaaaa-
E. Cab	ttatgttt	cggttttgatga...1050...ttatattcattaagacttaa	GGTTTTAGATTTTCAACT	ATGAGG	gagaactcagccaagatgc...386...aaaagttaatt	ttaaaaa-
O. Avi	ttatgttt	ccatttggatgc...1044...ttctattcattaagacttaa	GGTTTTAGATTTTCAACT	ATGAGG	gagaactcagccaagatgc...388...aaaagttaatt	ttaaaaa-
L. Afr	tcatattt	tggttttcatga...1048...ttatattcattaagacttaa	GGTTTTAGATTTTCAACT	ATGAGG	gagaactcagccaagatgc...390...aaaagttaatt	tgaaaaaa-
		* * * *	* *	** ***** **	*****	*****

id=34091 gene=ENSG00000169554 name=ZEB2 segment=chr2.145185614.145187122_-1 type=AN VIEW

Figure 382:



H. Sap	tctcgcag	a-ggttacctttcccgatggtgcaaaatcgacttgacataaactgttca	TCAGTTTCAGGGTTTTCCCTG	gaggtatttgcataaatca...	92...	cagcagcagagt	gaaagaca
R. Mac	tctcgcag	a-ggttacctttcccgatggtgcaaaatcgacttgacataaactgttca	TCAGTTTCAGGGTTTTCCCTG	gaggtatttgcataaatca...	92...	cagcagcagagt	gaaagaca
P. Tro	tctcgcag	a-ggttacctttcccgatggtgcaaaatcgacttgacataaactgttca	TCAGTTTCAGGGTTTTCCCTG	gaggtatttgcataaatca...	92...	cagcagcagagt	gaaagaca
C. Jac	tctcgcag	a-ggttacctttcccgatggtgcaaaatcgacttgacataaactgttca	TCAGTTTCAGGGTTTTCCCTG	gaggtatttgcataaatca...	92...	cagcagcagagt	gaaagaca
M. Mus	tctcgcag	a-ggttacctttcccgatggtgcaaaatcgacttgacataaactgttca	TCAGTTTCAGGGTTTTCCCTG	gaggtatttgcataaatca...	92...	cagcagcagagt	gaaagaca
C. Por	tctcgcag	a-ggttacctttcccgatggtgcaaaatcgacttgacataaactgttca	TCAGTTTCAGGGTTTTCCCTG	gaggtatttgcataaatca...	92...	cagcagcagagt	gaaagaca
O. Cun	tctcgcag	a-ggttacctttcccgatggtgcaaaatcgacttgacataaactgttca	TCAGTTTCAGGGTTTTCCCTG	gaggtatttgcataaatca...	92...	cagcagcagagt	gaaagaca
C. Fam	tctcgcag	a-ggttacctttcccgatggtgcaaaatcgacttgacataaactgttca	TCAGTTTCAGGGTTTTCCCTG	gaggtatttgcataaatca...	94...	cagtagcagagt	gaaagact
F. Cat	tctcgcag	a-ggttacctttcccgatggtgcaaaatcgacttgacataaactgttca	TCAGTTTCAGGGTTTTCCCTG	gaggtatttgcataaatca...	92...	cagtagcagagt	gaaagact
B. Tau	tctcgcag	a-ggttacctttcccgatggtgcaaaatcgacttgacataaactgttca	TCAGTTTCAGGGTTTTCCCTG	gaggtatttgcataaatca...	92...	cagtagcagagt	gaaagact
E. Cab	tctcgcag	agggttacctttcccgatggtgcaaaatcgacttgacataaactgttca	TCAGTTTCAGGGTTTTCCCTG	gaggtatttgcataaatca...	92...	cagtagcagagt	gaaagact
O. Avi	tctcgcag	a-ggttacctttcccgatggtgcaaaatcgacttgacataaactgttca	TCAGTTTCAGGGTTTTCCCTG	gaggtatttgcataaatca...	92...	cagtagcagagt	gaaagact
L. Afr	tctcgcag	a-ggttacctttcccgatggtgcaaaatcgacttgacataaactgttca	TCAGTTTCAGGGTTTTCCCTG	gaggtatttgcataaatca...	92...	cagtagcagagt	gaaagact

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id=34075 gene=ENSG00000169554 name=ZEB2 segment=chr2.145262008.145262200_-1 type=AN

H. Sap	tttttttc	ttttattcttct...4637...acaatttatgtactagcatg	TAGGccGAGAGCCTgTGAGGgCTGA	ctaattcagaaacagccacc...	263...	atgacggttgac	atagaaga
R. Mac	gttttttc	ttttatgtttct...4637...acaatttatgtactagcatg	TAGGccGAGAGCCTgTGAGGgCTGA	ctaattcagaaacagccacc...	263...	atgacggttgac	atagaagc
P. Tro	tttttttc	ttttattcttct...4637...acaatttatgtactagcatg	TAGGccGAGAGCCTgTGAGGgCTGA	ctaattcagaaacagccacc...	263...	atgacggttgac	atagaaga
C. Jac	tttttttc	ttttatgtttct...4637...acaatttatgtactagcatg	TAGGccGAGAGCCTgTGAGGgCTGA	ctaattcagaaacagccacc...	263...	atgacggttgac	atagaagc
M. Mus	tcttcttc	ttttatgggttt...4637...acaatttatgtactagcatg	TAGGccGAGAGCCTgTGAGGgCTGA	ctaattcagaaacagccacc...	263...	atgacggttgac	atagaaga
C. Por	cttttttc	ttttatgtttct...4639...acaatttatgtactagcatg	TAGGccGAGAGCCTgTGAGGgCTGA	ctaattcagaaacagccacc...	261...	atgatagttgac	gtaggagc
O. Cun	aaaatgag	ctgtattcccc...4636...acaatttatgtactagcatg	TAGGccGAGAGCCTgTGAGGgCTGA	ctaattcagaaacagccacc...	264...	atgacggttgac	gtagaagc
C. Fam	ttccccct	ttttgtttcttt...4645...acaatttatgtactagcatg	TAGGccGAGAGCCTgTGAGGgCTGA	ctaattcagaaacagccacc...	255...	atgacggttgac	gtagacgc
F. Cat	tttttctc	ttttattcttct...4637...acaatttatgtactagcatg	TAGGccGAGAGCCTgTGAGGgCTGA	ctaattcagaaacagccacc...	263...	atgacggttgac	gtagaagc
B. Tau	ttttcccc	atcattctttc...4637...acaatttatgtactagcatg	TAGGccGAGAGCCTgTGAGGgCTGA	ctaattcagaaacagccacc...	263...	atgacggttgat	gtagaagc
E. Cab	tttttttc	ttttatgtcttt...4637...acaatttatgtactagcatg	TAGGccGAGAGCCTgTGAGGgCTGA	ctaattcagaaacagccacc...	263...	atgacggttgac	gtagaagc
O. Avi	ttttcccc	tttcattctttc...4637...acaatttatgtactagcatg	TAGGccGAGAGCCTgTGAGGgCTGA	ctaattcagaaacagccacc...	263...	atgacggttgat	gtagaagc
L. Afr	tttttctt	ttttcagaatg...4637...acaatttatgtactagcatg	TAGGccGAGAGCCTgTGAGGgCTGA	ctaattcagaaacagccacc...	263...	atgacggttgac	gtagaagc

* ***** ** * **** * *

id=34082 gene=ENSG00000169554 name=ZEB2 segment=chr2.145188138.145219749_-1 type=IN VIEW

Figure 383:



H.Sap	tacattag	gtaagactttgc...4561...cttaacccttttgatgactc	ATATcTGAAgaTATG	TAAAGta	CAAAAAGAGT	tcttcatataatttcaagga	---...331...tctttgtttcag	gttatttg
R.Mac	tacattag	gtaagacttcgc...4566...-----ttttgatgactcatatctca	AGATATG	TAAAGta	CAAAAAGAGT	tcttcatataatttcaagga	---...334...tctttgtttcag	gttatttg
P.Tro	tacattag	gtaagactttgc...4563...cttaacccttttgatgactc	ATATcTGAAgaTATG	TAAAGta	CAAAAAGAGT	tcttcatataatttcaagga	---...329...tctttgtttcag	gttatttg
P.Abe	tacattag	gtaagactttgc...4572...-----ccttttgatgactca--tctga	AGATATG	TAAAGta	CAAAAAGAGT	tcttcatataatttcaagga	---...328...tctttgtttcag	gttatttg
C.Jac	tacattag	gtaagcctttgc...4563...-----ttttgatgactcatatctca	AGATATG	TAAAGta	CAAAAAGAGT	tcttcatataatttcaagga	---...337...tctttgtttcag	gttatttg
M.Mus	tacattag	gtaagtcgggct...4467...-----ttttgatgactcatatctca	AGATATG	TAAAGta	CAAAAAGAGT	tcttcatataatttcaagga	---...433...tctttgtttcag	gttatttg
R.Nor	tacattag	gtaagttggctg...4523...-----ttttgatgactcatctctca	AGATATG	TAAAGta	CAAAAAGAGT	tcttcatataatttcaagga	---...377...tctctgctgcag	gttatttg
C.Por	tacattag	gtaagtttgcctt...4574...-----ttttgatgactcatatctca	AGATATG	TAAAGta	CAAAAAGAGT	tcttcatataatttcaagga	---...326...tctttgtttcag	gttatttg
O.Cun	tacattag	gtaagactgctg...4536...-----ttttgatgactcatatctca	AGATATG	TAAAGta	CAAAAAGAGT	tcttcatataatttcaagga	---...364...tctctgtttcag	gttatttg
C.Fam	tacattag	gtaagacttggc...4544...-----ttttgatgactcatatctca	AGATATG	TAAAGta	CAAAAAGAGT	tcttcatataatttcaagga	---...356...tctttgtttcag	gttatttg
B.Tau	tacattag	gtaagacttggc...4557...-----ttttgatgactcatatctca	AGATATG	TAAAGta	CAAAAAGAGT	tcttcatataatgttcaagga	---...343...tctttgtttcag	gttatttg
S.Sus	tacattag	gtaagccttggc...4543...-----ttttgatgactcatatctca	AGATATG	TAAAGta	CAAAAAGAGT	tcttcatataatttcaagga	---...357...tctctgtttcag	gttatttg
L.Afr	tacattag	gtaaggtttgc...4563...-----ttttgatgactcatagctca	AGATATG	TAAAGta	CAAAAAGAGT	---tcatataatttcaaggacta	...337...tctttgtttcag	gttatttg
*****	*****	*****	**	*****	*****	*****	*** * * **	*****

id=781913 gene=ENSG00000143013 name=LMO4 segment=chr1_87797935_87805218.1 type=IN

H.Sap	ctaattggg	agactgtagaga...150...ctgtgttttac-cctaacaac	ATTCTaTTTGct	CTTTGTATATTTA	aGTGT	gtgaaggaacgtgtttcaa	...149...agaatgaaaaa	agaaaaaa
R.Mac	ctaattggg	agactgtagaga...155...ctgtgttttac-cctaacaac	ATTCTaTTTGct	CTTTGTATATTT	aagtggtgtaaggaacgtg	-----	...152...agaatgaaaaa	agaaaaaa
P.Tro	ctaattggg	agactgtagaga...150...ctgtgttttac-cctaacaac	ATTCTaTTTGct	CTTTGTATATTTA	aGTGT	gtgaaggaacgtgtttcaa	...150...agaatgaaaaa	agaaaaaa
P.Abe	ctaattggg	agactgtagaga...157...ctgtgttttac-cctaacaac	ATTCTaTTTGct	CTTTGTATATTT	aagtggtgtaaggaacgtg	-----	...155...agaatgaaaaa	agaaaaaa
C.Jac	ctaattggg	agactgtagaga...148...ctgtgttttac-cctaacaac	ATTCTaTTTGct	CTTTGTATATTT	aagtggtgtaaggaatgtg	-----	...145...gaaaaaa	agaaaaaa
M.Mus	ctaattggg	agactgtagaga...148...cctgtgttttac-tttaacaac	ATTCTgTTTGct	CTTTGTATATTT	aagtggtgtaaggaatgtg	-----	...152...aaaaaa	agaaaaaa
R.Nor	ctaattggg	agactgtagaga...147...-cctgtgtttactcctaactac	ATTCTgTTTGct	CTTTGTATATTT	aagtggtgtaaggaatgtg	-----	...155...aaaaaa	agaaaaaa
C.Por	ctaattggg	agactgtagaga...146...ctgtgttttac-cctaacaac	ATTCTaTTTGct	CTTTGTATATTT	aagtggtgtaaggaacgtg	-----	...157...aaaaaa	agaaaaaa
O.Cun	ctaattggg	agactgtagaga...148...ctgtgttttac-cctaacaac	ATTCTaTTTGct	CTTTGTATATTT	aagtggtgtaaggaacgtg	-----	...158...agaatgaaaaa	gaaaaaaa
C.Fam	ctaattggg	agactgtagaga...150...ctgtgttttac-cctaacaac	ATTCTaTTTGct	CTTTGTATATTT	aagtggtgtaaggaatgtg	-----	...164...atggaaaaa	gaaaaaaa
B.Tau	ctaattggg	agactgtagaga...149...ctgtgttttac-cctaacaac	ATTCTgTTTGct	CTTTGTATATTT	aagtggtgtaaggaatgtg	-----	...158...agaatgaaaaa	agaaaaaa
S.Sus	ctaattggg	agactgtagaga...148...ctgtgttttac-ccttccaac	ATTCTcTTTGct	CTTTGTATATTT	aagtggtgtaaggaatgtg	-----	...160...agaatgaaaaa	agaaaaaa
L.Afr	ctaattggg	agactgtagaga...151...ctgtgttttac-cctaacaac	ATTCTaTTTGct	CTTTGTATATTT	aagtggtgtaaggaatgtg	-----	...150...aaagaaaaa	agaaaaaa
*****	***	**** *	*****	**	* *****	*****	*** ** * **	** ** *

id=781919 gene=ENSG00000143013 name=LMO4 segment=chr1_87810699_87811091.1 type=E3 VIEW

Figure 385: CS=3.9



H.Sap	ccaacaag	gtagaaggccat...107..ggtgagagctgttcagagat-----ACAGGTGGAGAGTGAG	-aggga-tgtggtgggaatttc-----..267...cttgtttcccag	gcagcagc			
R.Mac	ccaacaag	gtagaaggccat...107..ggtgagagctgttcagagat-----ACAGGTGGAGAGTGAG	-agggc-tgtggtgggaatttc-----..267...cttgtttcccag	gcagcagc			
P.Tro	ccaacaag	gtagaaggccat...107..ggtgagagctgttcagagat-----ACAGGTGGAGAGTGAG	-aggga-tgtggtgggaatttc-----..267...cttgtttcccag	gcagcagc			
P.Abe	ccaacaag	gtagaaggccat...107..ggtgagagctgttcagagat-----ACAGGTGGAGAGTGAG	-aggga-tgtggtgggaatttc-----..267...cttgtttcccag	gcagcagc			
C.Jac	ccaacaag	gtagaaggccat...106..ggtgagagctgttcagagat-----ACAGGTGGAGAGTGAG	-aggga-tgtggtgggaatttg-----..266...cttgtttcccag	gcagcagc			
M.Mus	ccagcaag	gtagaaggcaat...97..ggtgaaagctgctcagaggt-----ACAGGTGGAGAGTGAG	gaatgactctgac--gcttctg-----..192...cttgtttcccag	gcagcagc			
R.Nor	ccagcaag	gtagaaggcaat...97..ggtgagagctgctcagaggt-----ACAGGTGGAGAGTGAG	ggATGcctctgac--acttctagccga..186...cttgtttcccag	gcagcagc			
C.Por	ccaacaag	gtagaaggcaat...106..ggtgagagctgttcagagac-----ACAGGTGGAGAGTGAG	-agggatgtggcaggaattt-----..263...cttgtttcccag	gcagcagc			
O.Cun	ccagcaag	gtagaaggcagc...92...--aaagttgatctgggtgagaGCTGTcaGAGAt	ACAGGTGGAGAGTGAG-agggatgtgggtggcattt-----..259...cttgtttcccag	gcagcagc			
C.Fam	ccagcaag	gtagaaggcaat...106..ggtgagagctgttcagagac-----ACAGGTGGAGAGTGAG	-agggg-catggtgggatttgc-----..275...cttgtttcccag	gcagcagc			
B.Tau	ccagcaag	gtagaaggcagt...106..ggtgagagctgttcagagac-----ACAGGTGGAGAGTGAG	-agggactgagccggccttct-----..275...cttgtttcccag	gcagcagc			
E.Cab	ccaacaag	gtagaaggcaat...106..ggtgagagctgttcagaggt-----ACAGGTGGAGAGTGAG	-agagattgtgggtggatttt-----..278...cttgtttcccag	gcagcagc			
L.Afr	ccaacaag	gtagaaggctat...94...--agagttgatctgggtgagaGCTGTcaGAGAt	ACAGGTGGAGAGTGAG-agggatgtgggtggatttt-----..279...cttgtttcccag	gcagcagc			
	*** **	*****	* * * * *	*****	* * *	***** **	*****

id=803643 gene=ENSG00000127481 name=UBR4 segment=chr1.19467387_19467840_-1 type=IN

H.Sap	ccaacaag	gtagaaggccat...399...----gacctggaggggatgttgtgCTCACTCTCCACTTGT	ttcccag	gcagcagc
R.Mac	ccaacaag	gtagaaggccat...399...----gacctggaggggatgttgtgCTCACTCTCCACTTGT	ttcccag	gcagcagc
P.Tro	ccaacaag	gtagaaggccat...399...----gacctggaggggatgttgtgCTCACTCTCCACTTGT	ttcccag	gcagcagc
P.Abe	ccaacaag	gtagaaggccat...399...----gacctggaggggatgttgtgCTCACTCTCCACTTGT	ttcccag	gcagcagc
C.Jac	ccaacaag	gtagaaggccat...397...----gacctggaggggatgttgtgCTCACTCTCCACTTGT	ttcccag	gcagcagc
M.Mus	ccagcaag	gtagaaggcaat...314...----ggggcagaggggacccctgtgTTCACCTCTCCACTTGT	ttcccag	gcagcagc
R.Nor	ccagcaag	gtagaaggcaat...309...tggacggggcagaggggaccCTGTgTTCACCTCTCCACTTGT	ttcccag	gcagcagc
C.Por	ccaacaag	gtagaaggcaat...394...----ggtctgcaggggatgttgtgCTCACTCTCCACTTGT	ttcccag	gcagcagc
O.Cun	ccagcaag	gtagaaggcagc...389...----ggcttggaggggacgttgtgTTCACCTCTCCACTTGT	tTCTCaG	GCAGCagc
C.Fam	ccagcaag	gtagaaggcaat...406...----ggtctggaggggaatgctgtgCTCACTCTCCACTTGT	ttcccag	gcagcagc
B.Tau	ccagcaag	gtagaaggcagt...406...----ggtgtggcggggacgctgtgCTCACTCTCCACTTGT	ttcccag	gcagcagc
E.Cab	ccaacaag	gtagaaggcaat...409...----ggtctgcaggggatgttgtgCTCACTCTCCACTTGT	ttcccag	gcagcagc
L.Afr	ccaacaag	gtagaaggctat...411...----ggcctggaggggatgttgtgCTCACTCTCCACTTGT	TTCcAG	GCAGCagc
	*** **	*****	* * * * *	*****

id=803643 gene=ENSG00000127481 name=UBR4 segment=chr1.19467387_19467840_-1 type=IN VIEW

Figure 386: CS=12.48



H. Sap	taatgctt	tggtaaaGAACCCCTTTCC	gtgccactggtgaatagga...78...accaattctgga	agtgtcta
R. Mac	taatgctt	tggtaaaGAACCCCTTTCC	gtgccactggtgaatagga...78...accaattctgga	agtgtcta
P. Tro	taatgctt	tggtaaaGAACCCCTTTCC	gtgccactggtgaatagga...78...accaattctgga	agtgtcta
P. Abe	taatgctt	tggtaaaGAACCCCTTTCC	gtgccactggtgaatagga...78...accaattctgga	agtgtcta
C. Jac	taatgctt	tggtaaaGAACCCCTTTCC	gtgccactggtgaatagga...78...accaattctgga	agtgtcga
M. Mus	taatGCTT	TGTTAaaGAACCCCTTTCC	gtgccactggtgaatagga...74...accaattctgga	agcatcta
R. Nor	taatGCTT	TGTTAaaGAACCCCTTTCC	gtgccactggtgaatagga...74...accaattctgga	tgcatcta
C. Por	taatgctt	tggtaaaGAACCCCTTTCC	gtgccactggtgaatagga...74...accaattctgga	agtatctt
O. Cun	taatgctt	tggtaaaGAACCCCTTTCC	gcgccactggtgaatagga...78...accaattctgga	agtgtctg
C. Fam	taatgctt	tggtaaaGAACCCCTTTCC	gcgccactggtgaatagga...78...accaattctgga	agtattta
F. Cat	taatgctt	tggtaaaGAACCCCTTTCC	gcgccactggtgaatagga...78...aacaattctgga	agtatcta
B. Tau	taatgctt	tggtaaaGAACCCCTTTCC	gcgccactggtgaatagga...78...accgatcctgga	agtgtctg
E. Cab	taatgctt	tggtaaaGAACCCCTTTCC	gtgccactggtgaatagga...78...accaattctgga	agtgtctt
L. Afr	taatgctt	tggtaaaGAACCCCTTTCC	gcgccactggtgaatagga...77...accaattctgga	agtgtcta
	*****	*****	*****	* * * * *

id=563349 gene=ENSG0000169714 name=CNBP segment=chr3_128888945_128889074_-1 type=E3

H. Sap	attctgga	agtgtctatgaa...481...-actattccaataaagctgga	GGAGgaAGGGGaGTTT	-gact	aaagttct
R. Mac	attctgga	agtgtctatgaa...481...-actattccaataaagctgga	GGAGgaAGGGGaGTTT	-gact	aaagttct
P. Tro	attctgga	agtgtctatgaa...481...-actattccaataaagctgga	GGAGgaAGGGGaGTTT	-gact	aaagttct
P. Abe	attctgga	agtgtctatgaa...481...-actattccaataaagctgga	GGAGgaAGGGGaGTTT	-gact	aaagttct
C. Jac	attctgga	agtgtcgatgaa...480...-actattccaataaagctgga	GGAGgaAGGGGaGTTT	-gact	aaagttct
M. Mus	attctgga	agcatctaagct...476...-actattccaataaagctgga	GGAGgaAGGGGaGTTT	TGACT	AAAGTtcc
R. Nor	attctgga	tgcatctaagct...477...-actattccaataaagctgga	GGAGgaAGGGGaGTTT	TGACT	AAAGTtcc
C. Por	attctgga	agtatctttcaa...476...-actattccaataaagctgga	GGAGgaAGGGGaGTTT	-gact	aaagttct
O. Cun	attctgga	agtgtctgtgaa...482...-actattccaataaagctgga	GGAGgaAGGGGaGTTT	-gact	aaagttct
C. Fam	attctgga	agtatttatgag...476...aactat-ccaataaagctgga	GGAGgaAGGGGaGTTT	-gact	aaagttct
F. Cat	attctgga	agtatctatgag...483...aactat-ccaataaagctgga	GGAGgaAGGGGaGTTT	-gact	aaagttct
B. Tau	atcctgga	agtgtctgtgag...477...aactat-ccaataaagctgga	GGAGgaAGGGGaGTTT	-gact	aaagttct
E. Cab	attctgga	agtgtctttgag...484...aactat-ccaataaagctgga	GGAGgaAGGGGaGTTT	-gact	aaagttct
L. Afr	attctgga	agtgtctatgaa...482...aactat-ccaataaagctgga	GGAGgaAGGGGaGTTT	-gact	aaagttct
	** *****	* *	**** *****	****	*****

id=563350 gene=ENSG0000169714 name=CNBP segment=chr3_128888412_128888944_-1 type=E3 VIEW

Figure 387:



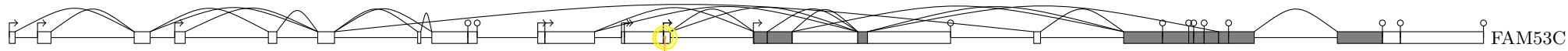
H. Sap	attctgga	agtgtctatgaa...363...gatgttattttgtatacta	TATCACTTAGA	CAACTG	tgtttcatttgcgtaatca--...89...gggagtttgact	aaagttct
R. Mac	attctgga	agtgtctatgaa...363...gatgttattttgtatacta	TATCACTTAGA	CAACTG	tgtttcatttgcgtaatca--...89...gggagtttgact	aaagttct
P. Tro	attctgga	agtgtctatgaa...363...gatgttattttgtatacta	TATCACTTAGA	CAACTG	tgtttcatttgcgtaatca--...89...gggagtttgact	aaagttct
P. Abe	attctgga	agtgtctatgaa...363...gatgttattttgtatacta	TATCACTTAGA	CAACTG	tgtttcatttgcgtaatca--...89...gggagtttgact	aaagttct
C. Jac	attctgga	agtgtcgatgaa...362...gatgttattttgtatacta	TATCACTTAGA	CAACTG	tgtttcatttgcgtaatca--...89...gggagtttgact	aaagttct
M. Mus	attctgga	agcatctaagct...357...gatgttattttgtatacta	TATCACTTAGA	CAACTG	tgtttcatttgcgtaatca--...91...gggagtttgact	aaagttcc
R. Nor	attctgga	tgcatctaagct...358...gatgttattttgtatacta	TATCACTTAGA	CAACTG	tgtttcatttgcgtaatca--...91...gggagtttgact	aaagttcc
C. Por	attctgga	agtatctttcaa...359...gatgttattttgtatacta	TATCACTTAGA	CAACTG	tgtttcatttgcgtaatcagt...88...gggagtttgact	aaagttct
O. Cun	attctgga	agtgtcgtgaa...364...gatgttattttgtatacta	TATCACTTAGA	CAACTG	tgtttcatttgcgtaatca--...89...gggagtttgact	aaagttct
C. Fam	attctgga	agtatttatgag...359...gatgttattttgtatacta	TATCACTTAGA	CAACTG	tgtttcatttgcgtaatca--...88...gggagtttgact	aaagttct
F. Cat	attctgga	agtatctatgag...366...gatgttattttgtatacta	TATCACTTAGA	CAACTG	tgtttcatttgcgtaatca--...88...gggagtttgact	aaagttct
B. Tau	atcctgga	agtgtcgtgag...360...gatgttattttgtatacta	TATCACTTAGA	CAACTG	tgtttcatttgcgtaatca--...88...gggagtttgact	aaagttct
E. Cab	attctgga	agtgtccttgag...367...gatgttattttgtatacta	TATCACTTAGA	CAACTG	tgtttcatttgcgtaatca--...88...gggagtttgact	aaagttct
L. Afr	attctgga	agtgtctatgaa...365...gatgttattttgtatacta	TATCACTTAGA	CAACTG	tgtttcatttgcgtaatca--...88...gggagtttgact	aaagttct
	** *****	* *	*****	*****	*****	*****

id=563350 gene=ENSG00000169714 name=CNBP segment=chr3_128888412_128888944_-1 type=E3

H. Sap	attctgga	agtgtctatgaa...398...tgtgtttcatttgcgtgtaat	CAGTTTTTAAAAGT	caGATG	gaaagagcaactgaagtcct...51...gggagtttgact	aaagttct
R. Mac	attctgga	agtgtctatgaa...398...tgtgtttcatttgcgtgtaat	CAGTTTTTAAAAGT	caGATG	gaaagagcaactgaagtcct...51...gggagtttgact	aaagttct
P. Tro	attctgga	agtgtctatgaa...398...tgtgtttcatttgcgtgtaat	CAGTTTTTAAAAGT	caGATG	gaaagagcaactgaagtcct...51...gggagtttgact	aaagttct
P. Abe	attctgga	agtgtctatgaa...398...tgtgtttcatttgcgtgtaat	CAGTTTTTAAAAGT	caGATG	gaaagagcaactgaagtcct...51...gggagtttgact	aaagttct
C. Jac	attctgga	agtgtcgatgaa...397...tgtgtttcatttgcgtgtaat	CAGTTTTTAAAAGT	caGATG	gaaaaagcaactgaagtcct...51...gggagtttgact	aaagttct
M. Mus	attctgga	agcatctaagct...392...tgtgtttcatttgcgtgtaat	CAGTTTTTAAAAGT	caGATG	gaaaaagcaactgaagtcct...53...gggagtttgact	aaagttcc
R. Nor	attctgga	tgcatctaagct...393...tgtgtttcatttgcgtgtaat	CAGTTTTTAAAAGT	caGATG	gaaaaagcaactgaagtcct...53...gggagtttgact	aaagttcc
C. Por	attctgga	agtatctttcaa...392...actgtttcatttgcgtgtaat	CAGTTTTTAAAAGT	caGATG	gaaaaagcaactgaagtcgt...52...gggagtttgact	aaagttct
O. Cun	attctgga	agtgtcgtgaa...399...tgtgtttcatttgcgtgtaat	CAGTTTTTAAAAGT	caGATG	gaaaaagcaactgaagtcct...51...gggagtttgact	aaagttct
C. Fam	attctgga	agtatttatgag...394...tgtgtttcatttgcgtgtaat	CAGTTTTTAAAAGT	caGATG	gaaaaagcaactgaagtcct...50...gggagtttgact	aaagttct
F. Cat	attctgga	agtatctatgag...401...tgtgtttcatttgcgtgtaat	CAGTTTTTAAAAGT	caGATG	gaaaaagcaactgaagtcct...50...gggagtttgact	aaagttct
B. Tau	atcctgga	agtgtcgtgag...395...tgtgtttcatttgcgtgtaat	CAGTTTTTAAAAGT	caGATG	gaaaaagcaactgaagtcct...50...gggagtttgact	aaagttct
E. Cab	attctgga	agtgtccttgag...402...tgtgtttcatttgcgtgtaat	CAGTTTTTAAAAGT	caGATG	gaaaaagcaactgaagtcct...50...gggagtttgact	aaagttct
L. Afr	attctgga	agtgtctatgaa...400...tgtgtttcatttgcgtgtaat	CAGTTTTTAAAAGT	caGATG	gaaagagcaactgaagtcct...50...gggagtttgact	aaagttct
	** *****	* *	*****	*****	*****	*****

id=563350 gene=ENSG00000169714 name=CNBP segment=chr3_128888412_128888944_-1 type=E3 VIEW

Figure 388:



```

H.Sap  gAGCGCTCaGAGCtgct
R.Mac  gAGCGCTCaGAGCtgct
P.Tro  gAGCGCTCaGAGCtgct
P.Abe  gAGCGCTCaGAGCtgct
C.Jac  gAGCGCTCaGAGCtgct
M.Mus  gAGCGCTCaGAGCtgct
R.Nor  gAGCGCTCaGAGCtgct
C.Por  gAGCGCTCaGAGCtgct
O.Cun  gAGCGCTCaGAGCtgct
C.Fam  gAGCGCTCaGAGCtgct
B.Tau  gAGCGCTCaGAGCtgct
E.Cab  gAGCGCTCaGAGCtgct
S.Sus  gAGCGCTCaGAGCtgct
O.Avi  gAGCGCTCaGAGCtgct
*****

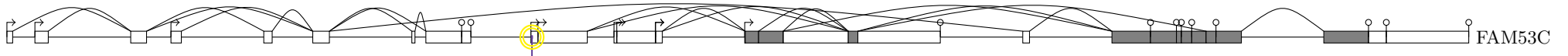
```

id=670828 gene=ENSG00000120709 name=FAM53C segment=chr5_137673955_137673955_1 type=AN

H.Sap	agcGCTC	a	GAGCtGCTC	cggccgcggccctgggagctggaggaaccg	gtaggtgg
R.Mac	agcGCTC	a	GAGCtGCTC	cggccgcggccctgggagctggaggagctgcg	gtaggtgg
P.Tro	agcGCTC	a	GAGCtGCTC	cggccgcggccctgggagctggaggagccgcg	gtaggtgg
P.Abe	agcGCTC	a	GAGCtGCTC	cggccgcggccctaggagctggaggagccgcg	gtaggtgg
C.Jac	agcGCTC	a	GAGCtGCTC	cggccgtggccctgggagctggaggagctgcg	gtaggtgg
M.Mus	agcGCTC	a	GAGCtGCTC	cggccgcggcccatggagctgtaggagccgcg	gtaggtag
R.Nor	agcGCTC	a	GAGCtGCTC	cggccgcggcccaggagctgtaaggagccgcg	gtaggtag
C.Por	agcGCTC	a	GAGCtGCTC	cggccgcggccctgggagctgaaggagccgcg	gtaggtgg
O.Cun	agcGCTC	a	GAGCtGCTC	cggccgcggccctgggaactggaggagccgcg	gtaggtgg
C.Fam	agcGCTC	a	GAGCtGCTC	cggccgcggcccaggagctggaggagccgcg	gtaggtgg
B.Tau	agcGCTC	a	GAGCtGCTC	cggccgcggccctgggaactggaggagccgcg	gtaggtgg
E.Cab	agcGCTC	a	GAGCtGCTC	cggccgcggccctgggaactggaggagccgcg	gtaggtgg
S.Sus	agcGCTC	a	GAGCtGCTC	tggccgcggccctgggagctggaggagccgcg	gtaggtgg
O.Avi	agcGCTC	a	GAGCtGCTC	cggccgcggccctgggaactggaggagccgcg	gtaggtgg
*****	*	*****	*****	*****	*****

id=670829 gene=ENSG00000120709 name=FAM53C segment=chr5_137673956_137673996_1 type=AN VIEW

Figure 389:



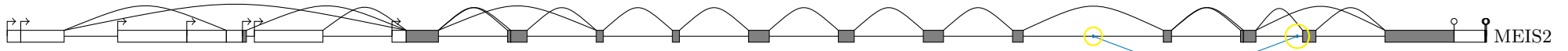
H.Sap	cattgttt	aaagcctctcct...325...acgcaagcaactgaaccgcc	TATGATG	TCATA	atc
R.Mac	cgcagttt	aaagcctctcct...322...acgcaagcaactgaaccgcc	TATGATG	TCATA	atc
P.Tro	cattgttt	aaagcctctcct...325...acgcaagcaactgaaccgcc	TATGATG	TCATA	atc
P.Abe	cattgttt	aaagcctctcct...323...acgcaagcaactgaaccgcc	TATGATG	TCATA	atc
C.Jac	cattgttt	aaagcctcttct...317...acgcaagcaactgaaccgcc	TATGATG	TCATA	atc
M.Mus	catttatt	gaaaaaatttt...276...caccgcccaactgagccacc	TATGATG	TCATA	atc
R.Nor	catttatt	gaaaacttttt...269...caccgcccaactgaaccacc	TATGATG	TCATA	atc
C.Por	cattgttt	aaaaatctcttt...305...gcgcaagcaaatgaaccatc	TATGATG	TCATA	atc
C.Fam	cattgttt	aaaacttctttt...326...ccgcaagcaactgaaccgcc	TATGATG	TCATA	atc
B.Tau	cattgttt	aaaacctctcct...325...acgcaagcaactgaaccgcc	TATGATG	TCATA	atc
E.Cab	cattgttt	aaaacctctcct...320...atgcaagcaactgaaccgcc	TATGATG	TCATA	atc
S.Sus	cattgttt	aaccaccccat...324...acgcaagcaactgaaccgcc	TATGATG	TCATA	atc
O.Avi	cattgttt	aaaacctctcct...325...acgcaagcaactgaaccgcc	TATGATG	TCATA	atc
L.Afr	cattgttt	aaaacctcttct...321...ccgcaagcaactgaaccgcc	TATGATG	TCATA	atc
	*	**	*	*	*****

id=670822 gene=ENSG00000120709 name=FAM53C segment=chr5_137672836_137673199.1 type=IN

H.Sap	cTATGATG	TCATA	atcacaatcccattacctcatcctgctggtgggggagg----	g	ggcggaga----
R.Mac	cTATGATG	TCATA	atcacaatcccattacctcatcctgctgagggg-----	g	ggcggaga----
P.Tro	cTATGATG	TCATA	atcacaatcccattacctcatcctgctggtgggggagg----	g	ggcggaga----
P.Abe	cTATGATG	TCATA	atcacaatcccattacctcatcctgctgagggg-----	g	ggcggaga----
C.Jac	cTATGATG	TCATA	atcacaatcccattacctcatcctgctggtggg--gg----	g	ggcggaga----
M.Mus	cTATGATG	TCATA	atcacaatcccattacctcatcctgctggtggggggggcgtaa		ggaggaaa----
R.Nor	cTATGATG	TCATA	atcacaatcccattacctcatcctgcttggggggggggcataa		ggaggata----
C.Por	cTATGATG	TCATA	atcacaatcccattacctcatcctgct---gggggg-----	a	ggtgtgaa----
C.Fam	cTATGATG	TCATA	atcacaaccccattacctcatcctgctggtgggggtggg-----		ggtgcgtag---
B.Tau	cTATGATG	TCATA	atcacaatcccattacctcatcctgctggtgggggtggg-----		ggcataga----
E.Cab	cTATGATG	TCATA	atcacaatcccattacctcatcctgctggtggggggggg-----	a	ggtgcgta----
S.Sus	cTATGATG	TCATA	atcacaatcccattacctcatcctgct---gggggg-----	g	ggtgcgtagggg
O.Avi	cTATGATG	TCATA	atcacaatcccattacctcatcctgct-ggggggtggg-----		ggcataaa----
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id=670823 gene=ENSG00000120709 name=FAM53C segment=chr5_137673200_137673242.1 type=AN VIEW

Figure 390: CS=10.92



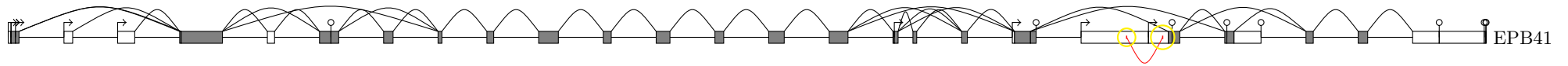
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R. Mac	aacaactg	gtgagtgaccca...4499...	g	gttggtgataaaaacttcaga	CAGCC	TAATTGATGG	ctttgctgacctaacaatac...411...	g	gttctgtttcag	g	gtttatta
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P. Abe	aacaactg	gtgagtgaccca...4498...	g	gttggtgataaaaacttcaga	CAGCC	TAATTGATGG	ctttgctgacctaacaatac...412...	g	gttctgtttcag	g	gtttatta
C. Jac	aacaactg	gtgagtgaccca...4513...	g	gttggtgataaaaacttcaga	CAGCC	TAATTGATGG	ctttgctgacctaacaatac...397...	g	gttctgtttcag	g	gtttatta
M. Mus	aacaactg	gtgagtgacccc...4518...	g	gttggtgataaaaacttcaga	CAGCC	TAATTGATGG	ctttgctgacctaacaatac...392...	g	cttctgtttcag	g	gtttatca
R. Nor	aacaactg	gtgagtgacccc...4513...	g	gttggtgataaaaacttcaga	CAGCC	TAATTGATGG	ctttgctgacctaacaatac...397...	g	cttctgtttcag	g	gtttatta
C. Por	aacaactg	gtgagtgacctg...4518...	g	gttggtgataaaaacttcaga	CAGCC	TAATTGATGG	ctttgctgacctaacaatac...392...	g	gctctattttag	g	gttcatca
D. Cun	aacaactg	gtgagtgaccca...4483...	g	gttggtgataaaaacttcaga	CAGCC	TAATTGATGG	ctttgctgacctaacaatac...427...	g	gttccgttccag	g	gtttatta
C. Fam	aacaactg	gtgagtgaccca...4492...	g	gttggtgataaaaacttcaga	CAGCC	TAATTGATGG	ctttgctgacctaacaatac...418...	g	gttctgtttcag	g	gtttatta
B. Tau	aacaactg	gtgagtgacccc...4505...	g	gttggtgataaaaacttcaga	CAGCC	TAATTGATGG	ctttgctgacctaacaatac...405...	g	cttctatttcag	g	gtttatta
E. Cab	aacaactg	gtgagtgaccg...4501...	g	gttggtgataaaaacttcaga	CAGCC	TAATTGATGG	ctttgctgacctaacaatac...409...	g	gctctatttcag	g	gtttatta
L. Afr	aacaactg	gtgagtgaccaa...4500...	g	gttggtgataaaaacttcaga	CAGCC	TAATTGATGG	ctttgctgacctaacaatac...410...	g	cttctgtttcag	g	gtttatta
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R. Mac	gcctgcag	gtaggttgctc...251...	g	agtttcctctatTTTTTCA	CCATCAATTA	attGCTG	atTTTccggcctcttcttgattttatctcctttctag	g	gacctatg		
P. Tro	gcctgcag	gtaggttgctc...252...	g	agtttcctctatTTTTTCA	CCATCAATTA	attGCTG	atTTTccggcctcttcttgattttatctcctttctag	g	gacctatg		
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C. Jac	gcctgcag	gtaggttgctc...253...	g	agtttcctctatTTTTTCA	CCATCAATTA	attGCTG	atTTTccggcctcttcttgattttatctcctttctag	g	gacctatg		
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C. Por	gcctgcag	gtaggtcctcct...248...	g	agtttcctctatTTTTTGT	CCATCAATTA	attGCTG	atTTTccggcctcttcttgattttatctcctttctag	g	gacctatg		
D. Cun	gcctgcag	gtaggcatgctc...241...	g	ctgaatttc--ctatTTTTTCA	CCATCAATTA	attGCTG	atTTTccggcctcttcttgattttatctcctttctag	g	gacctatg		
C. Fam	gcctgcag	gtaggttgctc...249...	g	agtttcctctagTTTTTCA	CCATCAATTA	attGCTG	atTTTccggcctcttcttgattttatctcctttctag	g	gacctatg		
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E. Cab	gcctgcag	gtaggttgctc...253...	g	agtttcctctatTTTTTCA	CCATCAATTA	attGCTG	atTTTccggcctcttcttgattttatctcctttctag	g	gacctatg		
L. Afr	gcctgcag	gtaggttgctc...254...	g	agtttcctctatTTTTTCA	CCATCAATTA	attGCTG	atTTTccggcctcttcttgattttatctcctttctag	g	gacctatg		
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Figure 391: CS=6.24



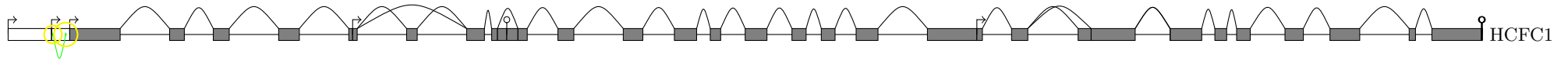
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P.Tro	gaatggga	gggtccaagca..1063..gtctcttctcaataactcca	AAGTgAATCTCTGACATTGATTGAaaGAAGT	taatgaattcgagggtaatg...	204...-agcttatgaaag--	tgattaca
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C.Por	gaatgcca	aggccctaagca..1038..-----cagtaattc	caaagtgaaatgTCTGACATTGATTGAaaGAAGT	taatgaattcgagggtaatg...	200...-agcttatgagag--	tgcttaca
O.Cun	gagtggga	gggcccccaagca..1100..-----cagtaattc	caaagtgaaatgTCTGACATTGATTGAaaGAAGT	taatgaattcgagggtaatg...	190...-agcttatgaaag--	tgattaca
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B.Tau	gaatggga	gggcccccaagcg..1011..-----caataactc	caaagtgaaatgTCTGACATTGATTGAaaGAAGT	taatgaattcgagggtaatg...	204...-agcctgcgaaaag--	tgacagct
E.Cab	gactggga	gggcccccaagca..1066..-----ttctcaatt	ctcacaagtgaatgAATTCTGACATTGATTGAaaGAAGT	taatgaattcgagggtaatg...	203...-aagcata-gaaag--	cgattaca
S.Sus	gaacggga	gggcccccaagca..1078..-----caatagctc	caaagtgagtgTCTGACATTGATTGAaaGAAGT	taatgagttccgggtaatg...	204...-agcatatgaaag--	tgatttcg
L.Afr	gaacagaa	gggcccccaagca..1148..-----taataactc	caaagtgaaatgTCTGACATTGATTGAaaGAAGT	taatgaactccagggtaatg...	202...-agcatatgaaag--	tgattaca
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id=795559 gene=ENSG00000159023 name=EPB41 segment=chr1.29422744.29424098.1 type=AN

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C.Jac	tatgaaat--	tgattatagtaa--...75..gtaaacacttaaaagctaac	ACTTTgaTCAGATCAGTGTGAGaAGATTACTT	-agattacttctccactaccttcagaataact--cta-taactctcttcttactgcttcacag	cctccccct
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Figure 393: CS=13



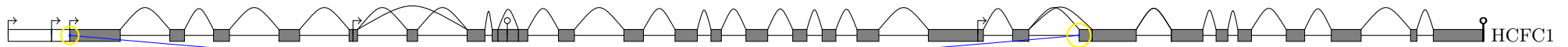
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C. Jac	acggtctc	aAGATGGCGGCTCC	cacaattgtggtctgagcgc...138...	gggaggagagag	aggcggct
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C. Fam	acggtctc	aagatggcggct...98...	gggggtgtgggaaccgggcc	GGGGCtcCGCCATT	ccggcggggaggggctacgactgaggaaggagagagag	aggcggct
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S. Sus	acggtctc	aagatggcggct...98...	gggggtgtgggaaccgggcc	GGGGCtcCGCCATT	ccggcggggaggggctacgactgaggaaggagagagag	aggcggct
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Figure 394:



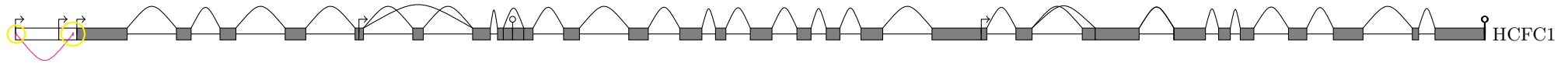
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P. Tro	acggtctc	aagatggcggct...135...	gcgggggagggtacgactg	AGGAAGGGA	GGAGAGAG	AGGcggct
P. Abe	acggtctc	aagatggcggct...135...	gcgggggagggtacgactg	AGGAAGGGA	GGAGAGAG	AGGcggct
C. Jac	acggtctc	aagatggcggct...135...	gcgggggagggtacgactg	AGGAAGGGA	GGAGAGAG	AGGcggct
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R. Nor	acggtctc	aagatggcggct...134...	gcgggggagggtacgactg	AGGAAGGGA	GGAGAGAG	AGGcggct
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S. Sus	acggtctc	aagatggcggct...136...	gcgggggagggtacgactg	AGGAAGGGA	GGAGAGAG	aggcggct
L. Afr	acggtctc	aagatggcggct...135...	gcgggggagggtacgactg	AGGAAGGGA	GGAGAGAG	AGGcggct
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M. Mus	ctgtgccg	gtaagcctcacc...434...	-ccctctcctctgacggggg	CTTCTCCCTTTCT	ag	aacatctc
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E. Cab	cggtgccg	gtaagagcccag...445...	-ctctcccctctgacggggg	CTTCTCCCTTTCT	ag	aagatctc
S. Sus	cggtgccg	gtaagagcccag...413...	-tctctcccctctgacgggg	TTTCTCCCTTTCT	ag	aagatctc
L. Afr	ctgtgccg	gtgagagcccag...516...	-ctctcccctctgacgggga	CTTCTCCCTTTCT	ag	aggatctc
	* ** **	** ** *		** **	**	*****

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Figure 395: CS=14



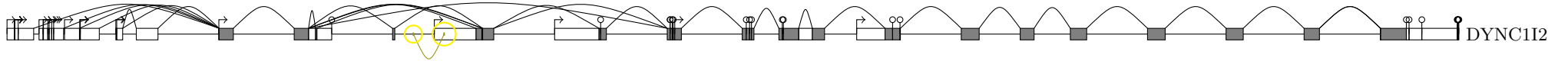
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R. Mac	ca-----	AGATGGCGGCTCC	cagggaggaggcatgagcgcctgcccgttaccgctccttc:::taaggcgctgggcggggaagcgggacggtctc
P. Tro	ca-----	AGATGGCGGCTCC	cagggaggaggcatgagcgcctgcccgttaccgcttcttc:::taaggcgctgggcggggaagcgggacggtctc
P. Abe	ca-----	AGATGGCGGCTCC	cagggaggaggcatgagcgcctgcccgttaccgctccttc:::taaggcgctgggcggggaagcgggacggtctc
C. Jac	caagatggcggctcccagggaggaggcatgagcgcctgc:::tgggtcggggcctgtttcgggagcgcggctgcactgagcg	CTGGCCGGGAAgcGGGA	-----cggtctc
M. Mus	ca-----	AGATGGCGGCTCC	cagggaggaggcatgatcgcctgcccgttaccgcttcttc:::taa-gtgcctgggtggggaagcaggacggttctc
R. Nor	ca-----	AGATGGCGGCTCC	cagggaggaggcatgatcgcctgcccgttaccgcttcttc:::taa-gtgcctgggtggggaagcaggacggtctc
C. Por	ca-----	AGATGGCGGCTCC	cagggaggaggcatgagcgcctgcccgttaccgctccttc:::tga-gcactgggcggggaagcgggacggtctc
O. Cun	ca-----	AGATGGCGGCTCC	cagggaggaggcatgagcgcctgcccgttaccgctccttc:::tga-gcactgggcggggaagcgggacggttctc
C. Fam	ca-----	AGATGGCGGCTCC	cagggaggaggcatgagcgcctgcccgttaccgctccttc:::taa-gcgcctgggcggggaagcgggacggtctc
F. Cat	ca-----	AGATGGCGGCTCC	cagggaggaggcatgagcgcctgcccgttaccgctccttc:::taa-gcgcctgggcggggaagcgggacggtctc
B. Tau	ca-----	AGATGGCGGCTCC	cagggaggaggcatgagcgcctgcccgttaccgctccttc:::taa-gcgcctgggcggggaagcgggacggtctc
E. Cab	ca-----	AGATGGCGGCTCC	cagggaggaggcatgagcgcctgcccgttaccgctccttc:::taa-gcgcctgggcggggaagcgggacggtctc
S. Sus	ca-----	AGATGGCGGCTCC	cagggaggaggcatgagcgcctgcccgttaccgctccttc:::taa-gcgcctgggcggggaagcgggacggtctc
L. Afr	ca-----	AGATGGCGGCTCC	cagggaggaggcatgagcgcctgcccgttaccgctcgttc:::aaa-gcgcctgggcggggaagcggcagcgtctc
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R. Mac	acggtctc	aagatggcggct...97...gggggtgtgggaaccgggcc	GGGGCtcCGCCATT	-----	ccggcgggggagggtacgactgaggaaggaggagagag	aggcggct
P. Tro	acggtctc	aagatggcggct...97...gggggtgtgggaaccgggcc	GGGGCtcCGCCATT	-----	ccggcgggggagggtacgactgaggaaggaggagagag	aggcggct
P. Abe	acggtctc	aagatggcggct...97...gggggtgtgggaaccgggcc	GGGGCtcCGCCATT	-----	ccggcgggggagggtacgactgaggaaggaggagagag	aggcggct
C. Jac	acggtctc	aagatggcggct...35...acgaccgcggcctgtggc--	TCTTTCCaaCCGC	CCGGAagccggccagtcctggggacttgggggtgtgggaaccgggcggggttcgcccattt	ccggcgggggagggtacgactgaggaaggaggagagag	aggcggct
M. Mus	acggttct	aagatggcggct...96...gggggtgtgggaaccgggcc	GGGGCtcCGCCATT	-----	ccggcgggggagggtacgactgaggaaggaggagagag	aggcggct
R. Nor	acggtctc	aagatggcggct...96...gggggtgtgggaaccgggcc	GGGGCtcCGCCATT	-----	ccggcgggggagggtacgactgaggaaggaggagagag	aggcggct
C. Por	acggtctc	aagatggcggct...96...tgggggtgtgggaaccgggcc	GGGGCtcCGCCATT	-----	ccggcggggaagggtacgactgaggaaggaggagagag	aggcggct
O. Cun	acgggttc	aagatggcggct...97...gggggtgtgggaaccgggcc	GGGGCtcCGCCATT	-----	ccggcgggggagggtacgactgaggaaggaggagagag	aggcggct
C. Fam	acggtctc	aagatggcggct...98...gggggtgtgggaaccgggcc	GGGGCtcCGCCATT	-----	ccggcgggggagggtacgactgaggaaggaggagagag	aggcggct
F. Cat	acggtctc	aagatggcggct...98...gggggtgtgggaaccgggcc	GGGGCtcCGCCATT	-----	ccggcgggggagggtacgactgaggaaggaggagagag	aggcggct
B. Tau	acggtctc	aagatggcggct...98...gggggtgtgggaaccgggcc	GGGGCtcCGCCATT	-----	ccggcaggggagggtacgactgaggaaggaggagagag	aggcggct
E. Cab	acggtctc	aagatggcggct...98...gggggtgtgggaaccgggcc	GGGGCtcCGCCATT	-----	ccggcgggggagggtacgactgaggaaggaggagagag	aggcggct
S. Sus	acggtctc	aagatggcggct...98...gggggtgtgggaaccgggcc	GGGGCtcCGCCATT	-----	ccggcgggggagggtacgactgaggaaggaggagagag	aggcggct
L. Afr	acggtctc	aagatggcggct...97...gggggtgtgggaaccgggcc	GGGGCtcCGCCATT	-----	ccggcgggggagggtacgactgaggaaggaggagagag	aggcggct
**** **	*****	* ** * * *	** **		***** ** *****	* ****

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Figure 396: CS=4.5



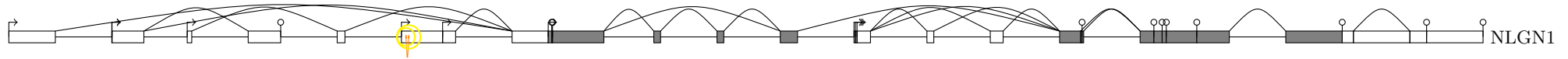
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R. Mac	atactggg	gtaaggaagttc...	99...	-attgctggaactaatgaac	GTTTTAAAGGAG	CATTCCTTT	--agctgcagtcgtttctctaa-----	...142...	cagagttgaatt	ttggcagc
P. Tro	atactggg	gtaaggaagttc...	99...	-attgctggaactaatgaac	ATTTTAAAGGAG	CATTCCTTT	--agctgcagtcatttctctaa-----	...140...	cagagttgaatt	ttggcagc
P. Abe	atactggg	gtaaggaagttc...	99...	-attgctggaactaatgaac	ATTTTAAAGGAG	CATTCCTTT	--agctgcagtcatttctctaa-----	...140...	cagagttgaatg	ttggcagc
C. Jac	atactggg	gtaaggaagttc...	99...	-attgctggaactaatgaac	ATTTTAAAGGAG	CATTCCTTT	--agctacagtcatttctctaa-----	...135...	cagagttgaatt	ttttagc
M. Mus	gtactggg	gtaaggaagttc...	100...	-attgctggaactaatgaac	ATTTTAAAGGAG	CATTCCTTT	--atctgta-tcatttccctaaa-----	...212...	aaagttctagtt	ttgccagt
R. Nor	gcactggg	gtaaggaagtta...	100...	-attgctggaactaatgaac	ATTTTAAAGGAG	CATTCCTTT	--atctaca-tcatgtcccttaa-----	...211...	aaagtttgact	ttgacagt
C. Por	atactggg	gtaaggaagtta...	100...	-attgctggaactaatagac	ATTTTAAAGGAG	CATTCCTTT	-----gcaatcattgtctaaattt---	...103...	agcattttaatt	ttggcagc
O. Cun	atactggg	gtaaggaagtta...	100...	-attgctggaactaatgggc	ATTTTAAAGGAG	CATTCCTTT	tagCTCTgt--tcattc-tctaaattgctg...	140...	gggatttaattt	ttgtcagc
C. Fam	atactggg	gtaaggaagtta...	99...	aattgctgg-aactaatggac	ATTTTAAAGGAG	CATTCCTTT	--agctgtagtcatttctttaa-----	...179...	agagttttgatt	ttgacaac
E. Cab	atactggg	gtaaggaagtta...	99...	aattgctggaactaat-ggc	ATTTTAAAGGAG	CATTCCTTT	-----aactacaatatttctctaa-----	...137...	agaattttgatt	ttgacagc
S. Sus	atactggg	gtaaggaagtta...	100...	-attgctggaactaatggac	ATTTTAAAGGAG	CATTCCTTT	--agtagagtcatttctctaa-----	...171...	nnnnnnnnnaa	tagacgac
L. Afr	atactggg	gtaaggaagtta...	100...	-attgctggaactaatgaat	ATTT-AGAGGAG	CATTCCTTT	--agcnnnnnnnnnnnnnnn-----	...173...	agagttttaatt	ttggcagc
	*****	*****		*****	*****	*****				*

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H. Sap	gttgaatt	ttggcagcaattgtaataatatttata---	atctggtgatattaaaagtgaaaagttacaaggggga	GAAGGAATGct	CTCCTTTg	AAAAT	tagtggccacatttgggtgat-...	222...	aaacgtcataag	ctgagcaa
R. Mac	gttgaatt	ttggcagcaattgtaataatatttata---	atctggtgatattaaaagtgaaaagttacaaggggga	GAAGGAATGct	CTCCTTTg	AAAAT	tagtggccacatttgggtgt-...	224...	aaacgtcataag	ctgagcaa
P. Tro	gttgaatt	ttggcagcaattgtaataatatttata---	atctggtgatattaaaagtgaaaagttacaaggggga	GAAGGAATGct	CTCCTTTg	AAAAT	tagtggccacatttgggtgat-...	222...	aaacgtcataag	ctgagcaa
P. Abe	gttgaatg	ttggcagcaattgtaataatatttata---	atctggtgatattaaaagtgaaaagttacaaggggga	GAAGGAATGct	CTCCTTTg	AAAAT	tagtggccacatttgggtgat-...	222...	aaacgtcataag	ctgagcaa
C. Jac	gttgaatt	ttttagcaattgtaataatatttata---	atctgataatattaaaattgaaaagttagaaggggga	GAAGGAATGct	CTCCTTTg	AAAAT	tagtggccacatttgggtgtc-...	225...	aaacatcataag	ctgagcaa
M. Mus	ttctagtt	ttgccagtgccagttaacacataaaa---	a-----ggggg	GAAGGAATGct	CTCCTTTg	AAAT	tagtggccgccttgggtgat-...	214...	aaacccataag	atgagcaa
R. Nor	ttttgact	ttagcagtgtaacagttaacacataaaa---	atacagtggtcatgtaagagtacattaaagcgggga	GAAGGAATGct	CTCCTTTg	AAAT	cagtggccgccttgggtgat-...	215...	aaacaccataag	ctgagcaa
C. Por	ttttaatt	ttggcagcaa-----ttata---	atctggtggtcttcaaagcggggaagttagaagaggag	AAGGAATGct	CTCCTTTg	AAAAT	tagtggccacatttgggtgat-...	214...	aaacgtcataag	ctgagcaa
O. Cun	tttaattt	ttgtcagcagttgtaataatgcttctgta---	acctggtggtcttaaaagtaagaatta---	GGGaa	AAAGGAATGct	CTCCTTTg	AAAAT	tagtggccacatttgggtgat-...	223...	aaacgtcataag
C. Fam	ttttgatt	ttgacaacaattataagtaattatttataat-	atctggtgatcttaaaagtgagaagttagaaggggga	GAAGGAATGct	CTCCTTTg	AAAAT	tagtggccacatttgggtgtt-...	217...	aaacgtcataag	ctgagcaa
E. Cab	ttttgatt	ttgacagcaattataaataacttaca---	atcaagtgatcttaaaagtgagaagttagaaggggga	GAAGGAATGct	CTCCTTTg	AAAGAT	tagtaccctcatttgggtgtt-...	225...	aaacgtcataag	ctgagcaa
S. Sus	nnnnnaa	tagacgacgattg-aagca---	ttataatgatctggtgatcttaaaagtgagaa---	agttagggga	GAAGGAATGct	CTCCTTTg	AAAAT	tagtggccacatttgggtgtt-...	224...	gaacatcataag
L. Afr	ttttaatt	ttggcagcggttatcatatttcttctatc---	atctggtgatcttaaaatgagaagtttaggaagaggga	GAAGGAATGct	CTCCTTTg	AAAAT	tagtggccca-atttgggtgatg...	231...	aaacgtcataag	ctgagcaa
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Figure 398: CS=7.8



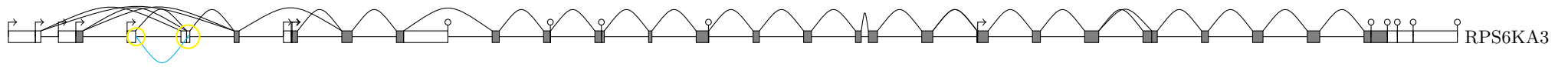
H. Sap	agcaccgg	gaattcatttttgaggtcaatttc	CAATCG	GATAA	TCTATT	GATTAGTAG	GATTATCTGATTG	cagccgaaagaagtaacg	ttt...267...	ggtaaatacttg	gaccattt				
R. Mac	agcaccgg	gaattcatttttgaggtcaatttc	CAATCG	GATAA	TCTATT	GATTAGTAG	GATTATCTGATTG	cagccgaaagaagtaacg	ttt...291...	ggtaaatacttt	gaccattt				
P. Tro	agcaccgg	gaattcatttttgaggtcaatttc	CAATCG	GATAA	TCTATT	GATTAGTAG	GATTATCTGATTG	cagccgaaagaagtaacg	ttt...270...	ggtaaatacttg	gaccattt				
P. Abe	agcaccgg	gaattcatttttgaggtcaatttc	CAATCG	GATAA	TCTATT	GATTAGTAG	GATTATCTGATTG	cagccgaaagaagtaacg	ttt...267...	ggtaaatacttg	gaccattt				
C. Jac	agtaccgg	gaattcatttttgaggtcaatttc	CAATCG	GATAA	TCTATT	GATTAGTAG	GATTATCTGATTG	cagctgaaagaagtaacg	ttt...271...	ggtaaatacttt	gaccattt				
M. Mus	agcactgg	ggattcatctttgaggtcaatttc	caATCG	GATAA	TCTATT	GATTAGTAG	ATTATCTGAT	cgcagctcaaagaagtaacg	ttt...276...	ggtaaatacttt	gaccgttt				
R. Nor	agcactgg	gaattcatttttgaggtcaatttc	caATCG	GATAA	TCTATT	GATTAGTAG	ATTATCTGAT	cgcagctcaaagaagtaacg	ttt...272...	ggtaaatacttt	gaccattt				
C. Por	accggtgg	taattcatttttgaggtcaatttc	CAATCG	GATAA	TCTATT	GATTAGTAG	GATTATCTGATTG	cagctgaaagaagtaacg	ttt...256...	ggtaaatacttt	ggccattt				
O. Cun	agcaccgg	gaattcatttttgaggtcaatttc	CAATCG	GATAA	TCTATT	GATTAGTAG	GATTATCTGATTG	cagctgaaagaagtaacg	ttt...276...	ggtaaatacttt	gcccattt				
C. Fam	ggcgccag	ggattcgttttgaggtcaatttc	ccATCG	GATAA	TCTATT	GATTAGTAG	ATTATCTGAT	tcagccgaaagaagtaacg	ttt...388...	gataaatacttg	gaccgatc				
B. Tau	agcaccag	ggattcatttttgaggtcaatttc	CAATCG	GATAA	TCTATT	GATTAGTAG	GATTATCTGATTG	cagctgaaagaagtaacg	ttt...294...	ggtaaatacttg	gagcaatt				
E. Cab	ggcgccga	ggattcatttttgaggtcaatttc	CAATCG	GATAA	TCTATT	GATTAGTAG	GATTATCTGATTG	cagctgaaagaagtaacg	ttt...263...	ggtaaatacttt	gaccaatt				
L. Afr	agcgccgg	gaatttatttttgaggtcaatttc	CAATCG	GATAA	TCTATT	GATTAGTAG	GATTATCTGATTG	cagctgaaagaagtaacg	ttt...279...	ggaaaacacttt	gaccattt				
			***	*	**	*****	*****	*****		*	**	***	****	*	*

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R. Mac	agcaccgg	gaattcatttttgaggtcaatttc	CAATC	AGAT	AAATCTATT	GATTAGTAG	ATTATCTGATTG	cagccgaaagaagtaacg	ttt...291...	ggtaaatacttt	gaccattt				
P. Tro	agcaccgg	gaattcatttttgaggtcaatttc	CAATC	AGAT	AAATCTATT	GATTAGTAG	ATTATCTGATTG	cagccgaaagaagtaacg	ttt...270...	ggtaaatacttg	gaccattt				
P. Abe	agcaccgg	gaattcatttttgaggtcaatttc	CAATC	AGAT	AAATCTATT	GATTAGTAG	ATTATCTGATTG	cagccgaaagaagtaacg	ttt...267...	ggtaaatacttg	gaccattt				
C. Jac	agtaccgg	gaattcatttttgaggtcaatttc	CAATC	AGAT	AAATCTATT	GATTAGTAG	ATTATCTGATTG	cagctgaaagaagtaacg	ttt...271...	ggtaaatacttt	gaccattt				
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R. Nor	agcactgg	gaattcatttttgaggtcaatttc	caATCG	GATAA	TCTATT	GATTAGTAG	ATTATCTGAT	cgcagctcaaagaagtaacg	ttt...272...	ggtaaatacttt	gaccattt				
C. Por	accggtgg	taattcatttttgaggtcaatttc	CAATC	AGAT	AAATCTATT	GATTAGTAG	ATTATCTGATTG	cagctgaaagaagtaacg	ttt...256...	ggtaaatacttt	ggccattt				
O. Cun	agcaccgg	gaattcatttttgaggtcaatttc	CAATC	AGAT	AAATCTATT	GATTAGTAG	ATTATCTGATTG	cagctgaaagaagtaacg	ttt...276...	ggtaaatacttt	gcccattt				
C. Fam	ggcgccag	ggattcgttttgaggtcaatttc	ccATCG	GATAA	TCTATT	GATTAGTAG	ATTATCTGAT	tcagccgaaagaagtaacg	ttt...388...	gataaatacttg	gaccgatc				
B. Tau	agcaccag	ggattcatttttgaggtcaatttc	CAATC	AGAT	AAATCTATT	GATTAGTAG	ATTATCTGATTG	cagctgaaagaagtaacg	ttt...294...	ggtaaatacttg	gagcaatt				
E. Cab	ggcgccga	ggattcatttttgaggtcaatttc	CAATC	AGAT	AAATCTATT	GATTAGTAG	ATTATCTGATTG	cagctgaaagaagtaacg	ttt...263...	ggtaaatacttt	gaccaatt				
L. Afr	agcgccgg	gaatttatttttgaggtcaatttc	CAATC	AGAT	AAATCTATT	GATTAGTAG	ATTATCTGATTG	cagctgaaagaagtaacg	ttt...279...	ggaaaacacttt	gaccattt				
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Figure 399:



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R.Mac	atgcttgt	aggattatatct...55...-tg	tgtgaaccttctcagtctc	CAGTCTCAg	gTATTTTt
P.Abe	atgcttgt	aggattatatct...55...-tg	tgtgaaccttctcagtctc	CAGTCTCAg	gTATTTTt
C.Jac	atgcttgt	aggattatatct...55...-tg	tgtgaaccttctcagtctc	CAGTCTCAg	gTATTTTt
M.Mus	atgcttat	aggattatatct...55...-tg	tgtgaaccttctcagtctg	CAGTCTCAg	gTATTTTt
R.Nor	atgcttat	aggagtatatct...55...-tg	tgtgaaccttctcagtctg	CAGTCTCAg	gTATTTTt
C.Por	atgcttat	aggattatatct...54...-tg	tgtgaaccttctcagtctc	CAGTCTCAg	gTATTTTt
O.Cun	atgcttat	aggattatatct...54...ct	gttgaaccttctcagtctc	TCAGTCTCAg	gTATTTTt
C.Fam	atgcttgt	aggattatatct...55...-tg	tgtgaaccttctcagtctc	CAGTCTCAg	gTATTTTt
F.Cat	atgcttgt	aggattatatct...55...-tg	tgtgaaccttctcagtctc	CAGTCTCAg	gTATTTTt
B.Tau	atgcttgt	aggattatatct...55...-tg	tgtgaaccttctcagtctc	CAGTCTCAg	gTATTTTt
E.Cab	atgcttgt	aggattatatct...54...-tg	tgtgaaccttctcagtctc	CAGTCTCAg	gTATTTTt
L.Afr	atgcttgt	aggattatatct...49...-ga	tctcaccttctcagtctc	CAGTCTCAg	gTATTTTt

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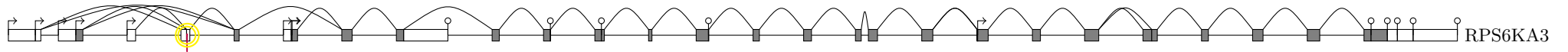
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R.Mac	ttccttAG	GATAaaTGAGgaGCTG	attccttaatcctgtcacattg	gtaaggat
P.Abe	ttccttAG	GATAaaTGAGgaGCTG	attccttaatcctgtcacattg	gtaaggat
C.Jac	ttccttAG	GATAaaTGAGgaGCTG	attccttaatcctgtcacattg	gtaaggat
M.Mus	ttccttAG	GATAaaTGAGgaGCTG	attccttaatcctgtcacattg	gtaaggat
R.Nor	ttccttAG	GATAaaTGAGgaGCTG	attccttaatcctgtcacattg	gtaaggat
C.Por	ttccttAG	GATAaaTGAGgaGCTG	attccttaatcctgtcacattg	gtaaggat
O.Cun	ttccttAG	GATAaaTGAGgaGCTG	attccttaatcctgtcacattg	gtaaggat
C.Fam	ttccttAG	GATAaaTGAGgaGCTG	attccttaatcctgtcatattg	gtaaggat
F.Cat	ttccttAG	GATAaaTGAGgaGCTG	attccttaatcctgtcatattg	gtaaggat
B.Tau	ttccttAG	GATAaaTGAGgaGCTG	attccttaatcctgtcacattg	gtaaggat
E.Cab	ttccttAG	GATAaaTGAGgaGCTG	attccttaatcctgtcacattg	gtaaggat
L.Afr	ttccttAG	GATAaaTGAGgaGCTG	attccttaatcctgtcacattg	gtaaggat

***** ***** ***** ***** ***** ***** ***** *****

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Figure 400:



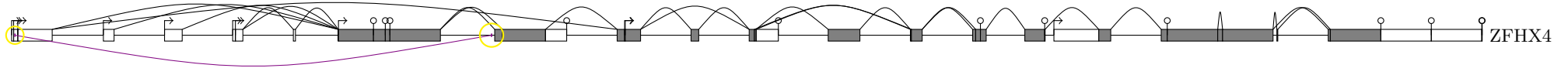
H. Sap	tttttcag	tataatgagtgatgatgaatatcactgtacataagtctttatgcacat	CTCTgaTATTCCTtAG	GA	taaatg
R. Mac	tttttcag	tataatgagtgatgatgaatatcactgtacataagtctttatgcacat	CTCTgaTATTCCTtAG	GA	taaatg
P. Tro	tttttcag	tataatgagtgatgatgaatatcactgtacataagtctttatgcacat	CTCTgaTATTCCTtAG	GA	taaatg
P. Abe	tttttcag	tataatgagtgatgatgaatatcactgtacataagtctttatgcacat	CTCTgaTATTCCTtAG	GA	taaatg
C. Jac	tttttcag	tataatgagtgatgatgaatatcactgtacataagtctttatgcacat	CTCTgaTATTCCTtAG	GA	taaatg
M. Mus	ttttaaag	tata-----atgaatatcactgtacataagtctttatgcacat	CTCTgaTATTCCTtAG	GA	taaatg
R. Nor	ttttaaag	tata-----atgaatatcactgtacataagtctttatgcacat	CTCTgaTATTCCTtAG	GA	taaatg
C. Por	tttttcag	tataatgagtgatgatgaatatcactgtacataagtctttatgcacat	CTCTgaTATTCCTtAG	GA	taaatg
O. Cun	tttttcag	tataatgagtgatgatgactatcactgtacataagtctttatgcacat	CTCTgaTATTCCTtAG	GA	taaatg
C. Fam	tttttcag	tataatgagtgatgatgaatatcactgtacataagtctttatgcacat	CTCTgaTATTCCTtAG	GA	taaatg
F. Cat	tttttcag	tataatgagtgatgatgaatatcactgtacataagtctttatgcacat	CTCTgaTATTCCTtAG	GA	taaatg
B. Tau	tttttcag	tataatgagtgatgatgaatatcactgtacat-agtctttatgcacat	CTCTgaTATTCCTtAG	GA	taaatg
E. Cab	tttttcag	tataatgagtgatgatgaatatcactgtacataagtctttatgcacat	CTCTgaTATTCCTtAG	GA	taaatg
L. Afr	tttttcag	tataatgagtgatgatgactatcactgtacataagtctttatgcacat	CTCTgaTATTCCTtAG	GA	taaatg
	****	** ****	**** *****	*****	*****

id=350773 gene=ENSG00000177189 name=RPS6KA3 segment=chrX_20258724_20258787_-1 type=AN

H. Sap	tTCCTtAG	GA	AATGaGGAG	ctgattccta	aatcctgtcacattg	gtaaggat
R. Mac	tTCCTtAG	GA	AATGaGGAG	ctgattccta	aatcctgtcacattg	gtaaggat
P. Tro	tTCCTtAG	GA	AATGaGGAG	ctgattccta	aatcctgtcacattg	gtaaggat
P. Abe	tTCCTtAG	GA	AATGaGGAG	ctgattccta	aatcctgtcacattg	gtaaggat
C. Jac	tTCCTtAG	GA	AATGaGGAG	ctgattccta	aatcctgtcacattg	gtaaggat
M. Mus	tTCCTtAG	GA	AATGaGGAG	ctgattccta	aatcctgtcacattg	gtaaggat
R. Nor	tTCCTtAG	GA	AATGaGGAG	ctgattccta	aatcctgtcacattg	gtaaggat
C. Por	tTCCTtAG	GA	AATGaGGAG	ctgattccta	aatcctgtcacattg	gtaaggat
O. Cun	tTCCTtAG	GA	AATGaGGAG	ctgattccta	aatcctgtcacattg	gtaaggat
C. Fam	tTCCTtAG	GA	AATGaGGAG	ctgattccta	aatcctgtcatattg	gtaaggat
F. Cat	tTCCTtAG	GA	AATGaGGAG	ctgattccta	aatcctgtcatattg	gtaaggat
B. Tau	tTCCTtAG	GA	AATGaGGAG	ctgattccta	aatcctgtcacattg	gtaaggat
E. Cab	tTCCTtAG	GA	AATGaGGAG	ctgattccta	aatcctgtcacattg	gtaaggat
L. Afr	tTCCTtAG	GA	AATGaGGAG	ctgattccta	aatcctgtcacattg	gtaaggat
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id=350774 gene=ENSG00000177189 name=RPS6KA3 segment=chrX_20258687_20258723_-1 type=AN VIEW

Figure 401:



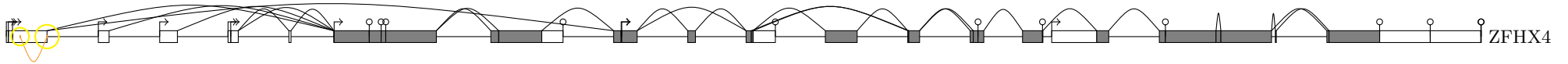
H. Sap	catatcGG	GAA	TAGAc	ACACA	aagacatg	cgccactca	acttaacagcc	at	tttttt
R. Mac	catatcGG	GAA	TAGAc	ACACA	aagacatg	cgccactca	acttaacagcc	at	tttttt
P. Tro	catatcGG	GAA	TAGAc	ACACA	aagacatg	cgccactca	acttaacagcc	at	tttttt
P. Abe	catatcGG	GAA	TAGAc	ACACA	aagacatg	cgccactca	acttaacagcc	at	tttttt
C. Jac	catatcGG	GAA	TAGAc	ACACA	aagacatg	cgccactca	acttaacagcc	at	tttttt
M. Mus	catatcGG	GAA	TAGAc	ACACA	aagacatg	cgccactca	acttaacagcc	at	tttttt
R. Nor	catatcGG	GAA	TAGAc	ACACA	aagacatg	cgccactca	acttaacagcc	at	tttttt
C. Por	catatcGG	GAA	TAGAc	ACACA	aagacatg	cgccactca	acttaacagcc	at	tttttt
O. Cun	catatcGG	GAA	TAGAc	ACACA	aagacatg	cgccactca	acttaacagcc	at	tttttt
C. Fam	catatcGG	GAA	TAGAc	ACACA	aagacatg	cgccactca	acttaacagcc	at	tttttt
E. Cab	catatcGG	GAA	TAGAc	ACACA	aagacatg	cgccactca	acttaacagcc	at	tttttt
S. Sus	catatcGG	GAA	TAGAc	ACACA	aagacatg	cgccactca	acttaacagcc	at	tttttt
L. Afr	catatcGG	GAA	TAGAc	ACACA	aagacatg	cgccactca	acttaacagcc	at	tttttt
	*****								*****

id=515926 gene=ENSG0000091656 name=ZFH4 segment=chr8.77593474.77593514.1 type=E5

H. Sap	agggctcg	g	ttagtatttc	...	788...	acagattc	ctttgtgtgtgc	TGTGT	tt	TCTAg	TCTC	tatttttc	ccttttaa	--	tttttttt	cctgtag	taaataat
R. Mac	agggctcg	g	ttagtatttc	...	790...	acagattc	ctttgtgtgtgc	TGTGT	tt	TCTAg	TCTC	tatttttc	ccttttaa	--	tttttttt	cctgtag	taaataat
P. Tro	agggctcg	g	ttagtatttc	...	788...	acagattc	ctttgtgtgtgc	TGTGT	tt	TCTAg	TCTC	tatttttc	ccttttaa	--	tttttttt	cctgtag	taaataat
P. Abe	agggctcg	g	ttagtatttc	...	790...	acagattc	ctttgtgtgtgc	TGTGT	tt	TCTAg	TCTC	tatttttc	ccttttaa	--	tttttttt	cctgtag	taaataat
C. Jac	agggctcg	g	ttagtatttc	...	785...	acagattc	ctttgtgtgtgc	TGTGT	tt	TCTAg	TCTC	tatttttc	ccttttaa	at	tttttttt	cctgtag	taaataat
M. Mus	aggacttg	g	ttagtatttc	...	766...	taacattc	ctttcatgtgtgc	TGTGT	tt	TCTAg	TCTC	tatttttc	ccttttaa	---	ttttcc	cctgtag	taaataat
R. Nor	gggacttg	g	ttagtatttc	...	775...	ttacattc	ctttcatgtgtgc	TGTGT	tt	TCTAg	TCTC	tatttttc	ccttttaa	---	ttttcc	cctgtag	taaataat
C. Por	tggactcg	g	tcagtatttc	...	808...	acagattc	ctttgtgtgtgc	TGTGT	tt	TCTAg	TCTC	tatttttc	ccttttaa	---	tttttt	cctgtag	taaataat
O. Cun	gggactcg	g	ttagtatttc	...	800...	acagattc	ctttgtgtgtgc	TGTGT	tt	TCTAg	TCTC	tatttttc	ccttttaa	---	tttttt	cctgtag	taaataat
C. Fam	aggacttg	g	tcagtatttc	...	790...	acagattc	ctttgtgtgtgc	TGTGT	tt	TCTAg	TCTC	tatttttc	ccttttaa	---	tttttt	cctgtag	taaataat
E. Cab	aggacttg	g	ttagtatttc	...	789...	acagattc	ctttgtgtgtgc	TGTGT	tt	TCTAg	TCTC	tatttttc	ccttttaa	--	tttttt	cctgtag	taaataat
S. Sus	gggacttg	g	tcagtatttc	...	794...	acagattc	ctttgtgtgtgc	TGTGT	tt	TCTAg	TCTC	tatttttc	ccttttaa	---	tttttt	cctgtag	taaataat
L. Afr	gggactcg	g	ttagtatttc	...	776...	-cagacc	ctttgtgtgtgc	TGTGT	tt	TCTAg	TCTC	tatttttc	ccttttaa	at	tttttt	cctgtag	taaataat
	** ** *		** ** ** *			*	* * * *					*	*	*	*	*	*

id=515943 gene=ENSG0000091656 name=ZFH4 segment=chr8.77618914.77619780.1 type=IN VIEW

Figure 402:



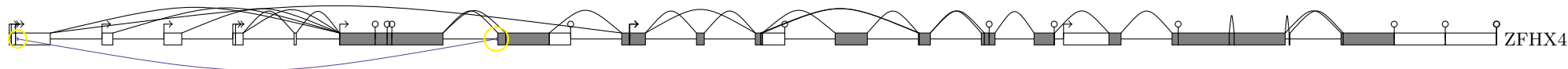
H.Sap	aatcagcc	a-tttttttaaacagggtaaaacgataataattagcagaataaagacatatcggtatttca	TTCCTTTC	TCCT	-----tttccaacccttcacaac...234...gggaaatggaaa	gtaagttt
R.Mac	aatcagcc	a-tttttttaaacagggtaaaacgataataattagcagaataaagacatatcggtatttca	TTCCTTTC	TCCT	-----tttccaacccttcacaac...233...gggaaatggaaa	gtaagttt
P.Tro	aatcagcc	a-tttttttaaacagggtaaaacgataataattagcagaataaagacatatcggtatttca	TTCCTTTC	TCCT	-----tttccaacccttcacaac...235...gggaaatggaaa	gtaagttt
P.Abe	aatcagcc	a-tttttttaaacagggtaaaacgataataattagcagaataaagacatatcggtatttca	TTCCTTTC	TCCT	-----tttccaacccttcacaac...233...gggaaatggaaa	gtaagttt
C.Jac	aatcagcc	a-tttttttaaacagggtaaaacgataataattagcagaataaagacatatcggtatttca	TTCCTTTC	TCCT	-----tttccaacccttcacaac...239...gggaaatggaaa	gtaagttt
M.Mus	aatcagcc	atTTTTTTTaaacagggtaaaacgataataattagcagaataaagacatatcgg-----	ATTTCATTTC	TCCT	tcctccttttccaaccct-----..240...gggaaatggaaa	gtaagttt
R.Nor	aatcagcc	a-tttttttaaacagggtaaaacgataataattagcagaataaagacatatcggtatttca	TTCCTTTC	TCCT	-----tttccaacccttcacaac...235...gggaaatggaaa	gtaagttt
C.Por	aatcagcc	a-tttttttaaacagggtaaaacgataataattagcagaataaagacatatcggtatttca	TTCCTTTC	TCCT	-----tttccaacccttcacaac...232...gggaaatggaaa	gtaagttt
O.Cun	aatcagcc	a-tttttttaaacagggtaaaacgataataattagcagaataaagacatatcggtatttca	TTCCTTTC	TCCT	-----tttccaacccttcacaac...235...gggaaatggaaa	gtaagttt
C.Fam	aatcagcc	a-tttttttaaacagggtaaaacgataataattagcagaataaagacatatcggtatttca	TTCCTTTC	TCCT	-----tttccaacccttcacaac...266...gggaaatggaaa	gtaagttt
B.Tau	aatcagcc	atTTTTTTTaaacagggtaaaacgataataattagcagaataaagacatatcggtatttca	TTCCTTTC	TCCT	-----tttccaacccttcacaac...233...gggaaatggaaa	gtaagttt
E.Cab	aatcagcc	a-tttttttaaacagggtaaaacgataataattagcagaataaagacatatcggtatttca	TTCCTTTC	TCCT	-----tttccaacccttcacaac...236...gggaaatggaaa	gtaagttt
S.Sus	aatcagcc	a-tttttttaaacagggtaaaacgataataattagcagaataaagacatatcggtatttca	TTCCTTTC	TCCT	-----tttccaacccttcacaac...236...gggaaatggaaa	gtaagttt
L.Afr	aatcagcc	a-tttttttaaacagggtaaaacgataataattagcagaataaagacatatcggtatttca	TTCCTTTC	TCCT	-----tttccaacccttcacaac...239...gggaaatggaaa	gtaagttt
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id=515927 gene=ENSG0000091656 name=ZFHx4 segment=chr8.77593515.77593855_1 type=EN

H.Sap	aatcagcc	atTTTTTTTaaac...295...gaagatcgagtaggaactgc	AGGGGAAA	GGAAA	gtaagttt
R.Mac	aatcagcc	atTTTTTTTaaac...294...gaagatcgagtaggaactgc	AGGGGAAA	GGAAA	gtaagttt
P.Tro	aatcagcc	atTTTTTTTaaac...296...gaagatcgagtaggaactgc	AGGGGAAA	GGAAA	gtaagttt
P.Abe	aatcagcc	atTTTTTTTaaac...294...gaagatcgagtaggaactgc	AGGGGAAA	GGAAA	gtaagttt
C.Jac	aatcagcc	atTTTTTTTaaac...300...gaagatcgagtaggaactgc	AGGGGAAA	GGAAA	gtaagttt
M.Mus	aatcagcc	atTTTTTTTaaac...296...gaagatcgagtaggaactgc	AGGGGAAA	gGAAA	GTaagttt
R.Nor	aatcagcc	atTTTTTTTaaac...296...gaagatcgagtaggaactgc	AGGGGAAA	GGAAA	gtaagttt
C.Por	aatcagcc	atTTTTTTTaaac...293...gaagatcgagtaggaactgc	AGGGGAAA	GGAAA	gtaagttt
O.Cun	aatcagcc	atTTTTTTTaaac...296...gaagatcgagtaggaactgc	AGGGGAAA	GGAAA	gtaagttt
C.Fam	aatcagcc	atTTTTTTTaaac...327...gaagatcgagtaggaactgc	AGGGGAAA	GGAAA	gtaagttt
B.Tau	aatcagcc	atTTTTTTTaaac...295...gaagatcgagtaggaactgc	AGGGGAAA	GGAAA	gtaagttt
E.Cab	aatcagcc	atTTTTTTTaaac...297...gaagatcgagtaggaactgc	AGGGGAAA	GGAAA	gtaagttt
S.Sus	aatcagcc	atTTTTTTTaaac...297...gaagatcgagtaggaactgc	AGGGGAAA	GGAAA	gtaagttt
L.Afr	aatcagcc	atTTTTTTTaaac...300...gaagatcgagtaggaactgc	AGGGGAAA	GGAAA	gtaagttt
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id=515927 gene=ENSG0000091656 name=ZFHx4 segment=chr8.77593515.77593855_1 type=EN VIEW

Figure 403:



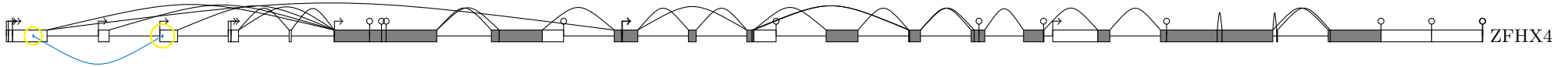
H.Sap	aatcagcc	atTTTT-TTAAAcAGGGctAAAAcgataataattagcagaata...	287...	gggaaatggaaa	gtaagttt
R.Mac	aatcagcc	atTTTT-TTAAAcAGGGctAAAAcgataataattagcagaata...	286...	gggaaatggaaa	gtaagttt
P.Tro	aatcagcc	atTTTT-TTAAAcAGGGctAAAAcgataataattagcagaata...	288...	gggaaatggaaa	gtaagttt
P.Abe	aatcagcc	atTTTT-TTAAAcAGGGctAAAAcgataataattagcagaata...	286...	gggaaatggaaa	gtaagttt
C.Jac	aatcagcc	atTTTT-TTAAAcAGGGctAAAAcgataataattagcagaata...	292...	gggaaatggaaa	gtaagttt
M.Mus	aatcagcc	atTTTT-TTAAAcAGGGctAAAAcgataataattagcagaata...	286...	gggaaatggaaa	gtaagttt
R.Nor	aatcagcc	atTTTT-TTAAAcAGGGctAAAAcgataataattagcagaata...	288...	gggaaatggaaa	gtaagttt
C.Por	aatcagcc	atTTTT-TTAAAcAGGGctAAAAcgataataattagcagaata...	285...	gggaaatggaaa	gtaagttt
O.Cun	aatcagcc	atTTTT-TTAAAcAGGGctAAAAcgataataattagcagaata...	288...	gggaaatggaaa	gtaagttt
C.Fam	aatcagcc	atTTTT-TTAAAcAGGGctAAAAcgataataattagcagaata...	319...	gggaaatggaaa	gtaagttt
B.Tau	aatcagcc	atTTTT-TTAAAcAGGGctAAAAcgataataattagcagaata...	286...	gggaaatggaaa	gtaagttt
E.Cab	aatcagcc	atTTTT-TTAAAcAGGGctAAAAcgataataattagcagaata...	289...	gggaaatggaaa	gtaagttt
S.Sus	aatcagcc	atTTTT-TTAAAcAGGGctAAAAcgataataattagcagaata...	289...	gggaaatggaaa	gtaagttt
L.Afr	aatcagcc	atTTTT-TTAAAcAGGGctAAAAcgataataattagcagaata...	292...	gggaaatggaaa	gtaagttt
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id=515927 gene=ENSG0000091656 name=ZFHx4 segment=chr8.77593515.77593855.1 type=EN

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R.Mac	agggctcg	gttagtatttgc...	808...	gctgtgttttctagtctcta---	TTTTTCCTTTTAA	--ttttttttcctgtag	taaataat
P.Tro	agggctcg	gttagtatttcc...	806...	gctgtgttttctagtctcta---	TTTTTCCTTTTAA	--ttttttttcctgtag	taaataat
P.Abe	agggctcg	gttagtatttgc...	808...	gctgtgttttctagtctcta---	TTTTTCCTTTTAA	--ttttttttcctgtag	taaataat
C.Jac	agggctcg	gttagtatttgc...	803...	actgtgttttctagtctcta---	TTTTTCCTTTTAA	ttttttttcctgtag	taaataat
M.Mus	aggacttg	gttagtactttc...	784...	gctgtgttttctagtctcta---	TTTTTCCTTTTAA	ttttttcctgtag	taaataat
R.Nor	gggacttg	gttagtactccc...	793...	gctgtgttttctagtctcta---	TTTTTCCTTTTAA	ttttttcctgtag	taaataat
C.Por	tggactcg	gtcagttattcac...	826...	gctgtgttttctagtctcta---	TTTTTCCTTTTAA	ttttttcctgtag	taaataat
O.Cun	ggggctcg	gttagtactttac...	818...	gctgtgttttctagtctcta---	TTTTTCCTTTTAA	ttttttttcctgtag	taaataat
C.Fam	aggacttg	gtcagttatttac...	808...	gctgtgttttctagtctcta---	TTTTTCCTTTTAA	ttttttttcctgtag	taaataat
B.Tau	gggacttg	gtcagttatttac...	800...	gctgtgttttctagtctcta---	TTTTTCCTTTTAA	ttttttttcctgtag	taaataat
E.Cab	aggacttg	gttagtatttcc...	822...	ctctcttttcc--cttttaatt	TTTTTTCTGT	agTAAA	----taat
S.Sus	gggacttg	gtcagttatttac...	812...	gctgtgttttctagtctcta---	TTTTTCCTTTTAA	ttttttcctgtag	taaataat
L.Afr	gggactcg	gttagtatttcc...	793...	gccgtgttttctagtctcta---	TTTTTCCTTTTAA	ttttttttcctgtag	taaataat
		** * *	** * * * *	* * * * *	** * * * *	***** * * *	****

id=515943 gene=ENSG0000091656 name=ZFHx4 segment=chr8.77618914.77619780.1 type=IN VIEW

Figure 404:



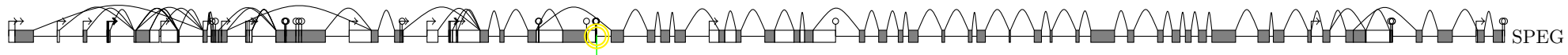
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R. Mac	aatcagcc	atntttttaaac...148...-----ccccccactttctgctccagCGTTTTTATTTTCACCCAATAAAGttcaggattatntttttatt...104...gggaaatggaaa	gtaagtnt
P. Tro	aatcagcc	atntttttaaac...148...-----ccccccactttctgctccagCGTTTTTATTTTCACCCAATAAAGttcaggattatntttttatt...106...gggaaatggaaa	gtaagtnt
P. Abe	aatcagcc	atntttttaaac...148...-----ccccccactttctgctccagCGTTTTTATTTTCACCCAATAAAGttcaggattatntttttatt...104...gggaaatggaaa	gtaagtnt
C. Jac	aatcagcc	atntttttaaac...148...-----ccccccactttctgctccagCGTTTTTATTTTCACCCAATAAAGttcaggattatntttttatt...110...gggaaatggaaa	gtaagtnt
M. Mus	aatcagcc	atntttttaaac...155...-----actnttttctccagcgtntttTATTtCACCCAATAAAGttcaggattatntttttatt...104...gggaaatggaaa	gtaagtnt
R. Nor	aatcagcc	atntttttaaac...151...-----cccactttctgctccagcgtTTTTTATTTTCACCCAATAAAGttcaggattatntttttatt...106...gggaaatggaaa	gtaagtnt
C. Por	aatcagcc	atntttttaaac...142...-----tccatgccccccactttctgCTCCagCGTTTTTATTTTCACCCAATAAAGttcaggattatntttttatt...103...gggaaatggaaa	gtaagtnt
O. Cun	aatcagcc	atntttttaaac...142...-----tccatgccccccactttctgCTCCagCGTTTTTATTTTCACCCAATAAAGttcaggattatntttttatt...106...gggaaatggaaa	gtaagtnt
C. Fam	aatcagcc	atntttttaaac...150...-----cccactttctgctccagcgtTTTTTATTTTCACCCAATAAAGttcaggattatntttttatt...137...gggaaatggaaa	gtaagtnt
B. Tau	aatcagcc	atntttttaaac...151...-----cccactttctgctccagcgtTTTTgATTTTCACCCAATAAAGttcaggattatntttttatt...104...gggaaatggaaa	gtaagtnt
E. Cab	aatcagcc	atntttttaaac...150...-----ccccccactttctgctccagcgtTTTTTATTTTCACCCAATAAAGttcaggattatntttttatt...107...gggaaatggaaa	gtaagtnt
S. Sus	aatcagcc	atntttttaaac...150...-----cccactttctgctccagcgtTTTTTATTTTCACCCAATAAAGttcaggattatntttttatt...107...gggaaatggaaa	gtaagtnt
L. Afr	aatcagcc	atntttttaaac...136...gaccgctccatgccccccTTCCTgCTCCagCGTTTTTATTTTCACCCAATAAAGttcaggattatntttttatt...110...gggaaatggaaa	gtaagtnt
*****		***** **	*****

id=515927 gene=ENSG0000091656 name=ZFH4 segment=chr8.77593515.77593855.1 type=EN

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R. Mac	gctcatat	gtagtattatatTTTAgTTGGGTGGAtgGATGGAagAGTG-----agagagaggctcggctgcc---...102...aacacagcccgg	gtagttaa
P. Tro	gctcatat	gtagtattatatTTTAgTTGGGTGGAtgGATGGAagAGTG-----agagagaggctcggctgcc---...102...aacacagcccgg	gtagttaa
P. Abe	gctcatat	gtagtattatatTTTAgTTGGGTGGAtgGATGGAagAGTG-----agagagaggctcggctgcc---...102...aacacagcccgg	gtagttaa
C. Jac	gctcatat	gtagtattatatTTTAgTTGGGTGGAtgGATGGAagAGTG-----agagagaggctcggctgcc---...102...aacacagcccgg	gtagttaa
M. Mus	cctcatat	gtagtattatatTTTAgTTGGGTGAATG-----tttggaaagtcaggagag-----...114...aacacagcccgg	gtagttaa
R. Nor	gctcatat	gtagtattatatTTTAgTTGGGTGGAtgGATGGAG-----tcaggagaggctcggctgcg---...104...aacacagcccgg	gtagttaa
C. Por	gctcatat	gtagaattatatTTTAgTTGGGTGGAtgGATGGAagAGTGagGGAGaggctcggctgccgctgcc---...96...aacacagcccgg	gtagttaa
O. Cun	gctcatat	gtagtattatatTTTAgTTGGGTGGAtgGATGgcAGAGTgagGGAGaggctcggctgccgctgcc---...96...aacacagcccgg	gtagttaa
C. Fam	gctcatat	gtagtattatatTTTAgTTGGGTGGAtgGATGGAAg-----agtcaggagaggctcggc-----...106...aacacagcccgg	gtagttaa
B. Tau	gctcatat	gtagtattatatTTTAgTTGGGTGGAtgGATGGAA-----gagtcaggagaggctcggc-----...107...aacacagcccgg	gtagttaa
E. Cab	gctcatat	gtagtattatatTTTAgTTGGGTGGAtgGATGGAAg-----agtcaggagaggctcggc-----...106...aacacagcccgg	gtagttaa
S. Sus	gctcatat	gtagtattatatTTTAgTTGGGTGGAtgGATGGAAg-----agtcaggagaggctcggc-----...106...aacacagcccgg	gtagttaa
L. Afr	gctcatat	gtagtattatatTTTAgTTGGGTGGAtgGATGGAAgAGTGGGGAGAGGctcggctgccgctgcc...93...aacacagcccgg	gtagttaa
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id=515931 gene=ENSG0000091656 name=ZFH4 segment=chr8.77596016.77596190.1 type=AN VIEW

Figure 405:



```

R.Mac tttGTACCcAGCTGGTg
P.Abe tttGTACCcAGCTGGTg
C.Jac tttGTACCcAGCTGGTg
R.Nor tttGTACCcAGCTGGTg
C.Por tttGTACCcAGCTGGTg
O.Cun tttGTACCcAGCTGGTg
C.Fam tttGTACCcAGCTGGTg
F.Cat tttGTACCcAGCTGGTg
B.Tau tttGTACCcAGCTGGTg
E.Cab tttGTACCcAGCTGGTg
O.Avi tttGTACCcAGCTGGTg
L.Afr tttGTACCcAGCTGGTg
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id=633138 gene=ENSG0000072195 name=SPEG segment=chr2.220331583_220331583.1 type=AN

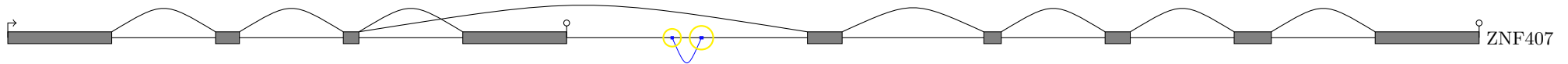
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R.Mac ttgTACCcAGCTGGTg
P.Abe ttgTACCcAGCTGGTg
C.Jac ttgTACCcAGCTGGTg
R.Nor ttgTACCcAGCTGGTg
C.Por ttgTACCcAGCTGGTg
O.Cun ttgTACCcAGCTGGTg
C.Fam ttgTACCcAGCTGGTg
F.Cat ttgTACCcAGCTGGTg
B.Tau ttgTACCcAGCTGGTg
E.Cab ttgTACCcAGCTGGTg
O.Avi ttgTACCcAGCTGGTg
L.Afr ttgTACCcAGCTGGTg
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id=633139 gene=ENSG0000072195 name=SPEG segment=chr2.220331584_220331584.1 type=AN VIEW

Figure 408: CS=137.16



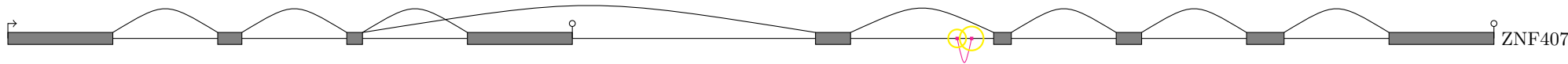
H. Sap	tgattact	atagccagtctc...4620...-----gttgagtatggatagcattt	CATTTAGCCTTTGCTCTG	acagcccctgacagaaaaat	...287...tccttcacacag	gaaattta
R. Mac	tgattact	atagccagtctc...4620...-----gttgagtatggatagcattt	CATTTAGCCTTTGCTCTG	acagcccctgacagaaaaat	...287...tccttcacacag	gaaattta
P. Tro	tgattact	atagccagtctc...4620...-----gttgagtatggatagcattt	CATTTAGCCTTTGCTCTG	acagcccctgacagaaaaat	...287...tccttcacacag	gaaattta
P. Abe	tgattact	atagccagtctc...4620...-----gttgagtatggatagcattt	CATTTAGCCTTTGCTCTG	acagcccctgacagaaaaat	...287...tccttcacacag	gaaattta
C. Jac	tgattact	atagccagtctc...4623...-----gttgagtatggatagcattt	CATTTAGCCTTTGCTCTG	acagcccctgacagaaaaat	...284...tccttcacacag	gaaattta
M. Mus	tgattact	atagccagtctc...4617...--agtgccttgagtatggatagc	ATTTCATTAGCCTTTGCTCTG	acagcccctgacagaaaaat	...286...tccttcacacag	gaaattta
C. Por	tgattact	atagccagtctc...4627...-----gttgagtatggatagcattt	CATTTAGCCTTTGCTCTG	acagcccctgacagaaaaat	...280...tccttcacacag	gaaattta
O. Cun	tgattact	atagccagtctc...4625...-----gttgagtatggatagcattt	CATTTAGCCTTTGCTCTG	acagcccctgacagaaaaat	...282...tccttcacacag	gaaattta
C. Fam	tgattact	atagccagtctc...4613...tgagttagtttagatggata	GCTTttCATTTAGCCTTTGCTCTG	acagcccctgacagaaaaat	...288...tccttcacacag	gaaattta
F. Cat	tgattact	atagccagtctc...4613...tgagttagtttagatggata	GCTTttCATTTAGCCTTTGCTCTG	acagcccctgacagaaaaat	...288...tccttcacacag	gaaattta
B. Tau	tgattact	atagccagtctc...4621...ggagttagtttagatggata	GCTTttCATTTAGCCTTTGCTCTG	acagcccctgacagaaaaat	...280...tccttcacacag	gaaattta
E. Cab	tgattact	atagccagtctc...4614...tgagttagtttagatggata	GCTTttCATTTAGCCTTTGCTCTG	acagcccctgacagaaaaat	...287...tccttcacacag	gaaattta
S. Sus	tgattact	atagccagtctc...4615...tgagttagtttagatggata	GCTTttCATTTAGCCTTTGCTCTG	acagcccctgacagaaaaat	...286...tccttcacacag	gaaattta
L. Afr	tgattact	atagccagtctc...4613...tgagttagtttagatggata	GCTTttCATTTAGCCTTTGCTCTG	acagcccctgacagaaaaat	...288...tccttcacacag	gaaattta
	**** * *	* * * *	** *****	*****	*** *****	*** ** *

id=442895 gene=ENSG00000215421 name=ZNF407 segment=chr18.72516581.72589152.1 type=IN

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R. Mac	tgattact	atagccagtctc...4758...cgttgggcccaaccgcaaa	CAGAGaaTAAAtGGCTg	AAGTGccaggcctgcagaaaaat	-----...145...tccttcacacag	gaaattta
P. Tro	tgattact	atagccagtctc...4758...cgttgggcccaaccgcaaa	CAGAGaaTAAAtGGCTg	AAGTGccaggcctgcagaaaaat	-----...145...tccttcacacag	gaaattta
P. Abe	tgattact	atagccagtctc...4758...cgttgggcccaaccgcaaa	CAGAGaaTAAAtGGCTg	AAGTGccaggcctgcagaaaaat	-----...145...tccttcacacag	gaaattta
C. Jac	tgattact	atagccagtctc...4761...cgttgggcccaaccgcaaa	CAGAGaaTAAAtGGCTg	AAGTGccaggcctgcagaaaaat	-----...142...tccttcacacag	gaaattta
M. Mus	tgattact	atagccagtctc...4759...cgttgggcccaaccgcaaa	CAGAGaaTAAAtGGCTg	AAGTGccaggcctgcagaaaaat	caatgc...138...tccttcacacag	gaaattta
C. Por	tgattact	atagccagtctc...4765...cgttgggcccaaccgcaaa	CAGAGaaTAAAtGGCTg	AAGTGccaggcctgcagaaaaat	-----...138...tccttcacacag	gaaattta
O. Cun	tgattact	atagccagtctc...4763...cgttgggcccaaccgcaaa	CAGAGaaTAAAtGGCTg	AAGTGccaggcctgcagaaaaat	-----...140...tccttcacacag	gaaattta
C. Fam	tgattact	atagccagtctc...4757...cgttgggcccaaccgcaaa	CAGAGaaTAAAtGGCTg	AAGTGccaggcctgcagaaaaat	caatgc...140...tccttcacacag	gaaattta
F. Cat	tgattact	atagccagtctc...4757...cgttgggcccaaccgcaaa	CAGAGaaTAAAtGGCTg	AAGTGccaggcctgcagaaaaat	caatgc...140...tccttcacacag	gaaattta
B. Tau	tgattact	atagccagtctc...4765...cgttgggcccaaccgcaaa	CAGAGaaTAAAtGGCTg	AAGTGccaggcctgcagaaaaat	caatgc...132...tccttcacacag	gaaattta
E. Cab	tgattact	atagccagtctc...4758...cgttgggcccaaccgcaaa	CAGAGaaTAAAtGGCTg	AAGTGccaggcctgcagaaaaat	caatgc...139...tccttcacacag	gaaattta
S. Sus	tgattact	atagccagtctc...4759...cgttgggcccaaccgcaaa	CAGAGaaTAAAtGGCTg	AAGTGccaggcctgcagaaaaat	caatgc...138...tccttcacacag	gaaattta
L. Afr	tgattact	atagccagtctc...4757...cgttgggcccaaccgcaaa	CAGAGaaTAAAtGGCTg	AAGTGccaggcctgcagaaaaat	caatgc...140...tccttcacacag	gaaattta
	**** * *	* * * *	*****	** *****	*** *****	*** ** *

id=442895 gene=ENSG00000215421 name=ZNF407 segment=chr18.72516581.72589152.1 type=IN VIEW

Figure 409:



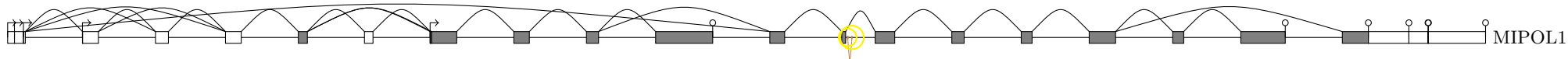
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R. Mac	gcacacag	gtgtgccgcgcc...3438...	atTTTTatgggtctgacaag	TATGTAAt	TATGTTc	AGTGGt	gcttttcagatTTtatcac...140...	ttgTtgcaac--ag	gcgagaag
P. Tro	gcacacag	gtgtgccgcgcc...3447...	atTTTTatgggtctgacaag	TATGTAAt	TATGTTc	AGTGGt	gcttttcagatTTtatcac...140...	ttgTtgcaac--ag	gcgagaag
P. Abe	gcacacag	gtgtgccgcgcc...3437...	atTTTTatgggtctgacaag	TATGTAAt	TATGTTc	AGTGGt	gcttttcagatTTtatcac...140...	ttgTtgcaac--ag	gcgagaag
C. Jac	gcacacag	gtgtgccacgcc...3702...	atTTTTatgggtctgacaag	TATGTAAt	TATGTTc	AGTGGt	gcttttcagatTTtatcac...140...	ttgTtgcaac--ag	gcgagaag
M. Mus	gcacacag	gtgtgtcacagc...3317...	atTTTTatgggtctgacaag	TATGTAAt	TATGTTc	AGTGGt	gcttttcagatTTtatcac...140...	ttgTtgcaac--ag	gcgagaag
R. Nor	acacacag	gtgtgtcacacct...3282...	atTTTTatgggtctgacaag	TATGTAAt	TATGTTc	AGTGGt	gcttttcagatTTtatcac...140...	ttgTtgcaac--ag	gcgagaag
C. Por	gcacacag	gtgtgctctgtc...3420...	atTTTTatgggtctgacaag	TATGTAAt	TATGTTc	AGTGGt	gcttttcagatTTtatcac...140...	ttgTtgcaac--ag	gcgagaag
O. Cun	gcacacag	gtgtgccatgcc...3561...	atTTTTatgggtctgacaag	TATGTAAt	TATGTTc	AGTGGt	gcttttcagatTTtatcac...140...	ttgTtgcaac--ag	gcgagaag
C. Fam	acacacag	gtgtgcaacct...3967...	atTTTTatgggtctgacaag	TATGTAAt	TATGTTc	AGTGGt	gcttttcagatTTtatcac...140...	ttgTtgcaac--ag	gcgagaag
F. Cat	gcacacag	gtgtgcagacct...3462...	---tttatgggtctgacaag	atGTAAt	TATGTTc	AGTGGt	gcttttcagatTTtatcac...128...	---gttgcaaccagg	gCGaagaa
B. Tau	gcacacag	gtgtgcccgtcc...3674...	atTTTTatgggtctgacaag	TATGTAAt	TATGTTc	AGTGGt	gcttttcagatTTtatcac...140...	ttgTtgcaac--ag	gcgagaag
E. Cab	gcacacag	gtgtgcccgtg...3477...	atTTTTatgggtctgacaag	TATGTAAt	TATGTTc	AGTGGt	gcttttcagatTTtatcac...126...	cccctacctc--ag	gCGaagaa
S. Sus	gcacacag	gtgtgcccaggt...3406...	atTTTTatgggtctgacaag	TATGTAAt	TATGTTc	AGTGGt	gcttttcagatTTtatcac...140...	ttgTtgcaac--ag	gcgagaag
L. Afr	ccacacag	gttgggagcttt...3408...	atTTTTatgggtctgacaag	TATGTAAt	TATGTTc	AGTGGt	gcttttcagatTTtatcac...140...	ttgTtgcaac--ag	gcgagaag
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id=442897 gene=ENSG00000215421 name=ZNF407 segment=chr18.72589320.72592991.1 type=IN

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R. Mac	gcacacag	gtgtgccgcgcc...3508...	ccgcagtggttaatttcattc	CCATTt	GACATAt	TTACATG	---gaacatttgattggaggaa...70...	ttgTtgcaac--ag	gcgagaag
P. Tro	gcacacag	gtgtgccgcgcc...3517...	ccgcagtggttaatttcattc	CCATTt	GACATAt	TTACATG	---gaacatttgattggaggaa...70...	ttgTtgcaac--ag	gcgagaag
P. Abe	gcacacag	gtgtgccgcgcc...3507...	ccgcagtggttaatttcattc	CCATTt	GACATAt	TTACATG	---gaacatttgattggaggaa...70...	ttgTtgcaac--ag	gcgagaag
C. Jac	gcacacag	gtgtgccaccgcc...3772...	ctgcagtggttaatttcattc	CCATTt	GACATAt	TTACATG	---gaacatttgattggaggaa...70...	ttgTtgcaac--ag	gcgagaag
M. Mus	gcacacag	gtgtgtcacagc...3387...	ccgcagtggttaatttcattc	CCATTt	GACATAt	TTACATG	---gaacatttgattggaggaa...70...	ttgTtgcaac--ag	gcgagaag
R. Nor	acacacag	gtgtgtcacacct...3352...	ccgcagtggttaatttcattc	CCATTt	GACATAt	TTACATG	---gaacatttgattggaggaa...70...	ttgTtgcaac--ag	gcgagaag
C. Por	gcacacag	gtgtgctctgtc...3490...	ccgcagtggttaatttcattc	CCATTt	GACATAt	TTACATG	---gaacatttgattggaggaa...70...	ttgTtgcaac--ag	gcgagaag
O. Cun	gcacacag	gtgtgccatgcc...3631...	ccgcagtggttaatttcattc	CCATTt	GACATAt	TTACATG	---gaacatttgattggaggaa...70...	ttgTtgcaac--ag	gcgagaag
C. Fam	acacacag	gtgtgcaacct...4037...	ccgcagtggttaatttcattc	CCATTt	GACATAt	TTACATG	---gaacatttgattggaggaa...70...	ttgTtgcaac--ag	gCGaagaa
F. Cat	gcacacag	gtgtgcagacct...3529...	ccgcagtggttaatttcattc	CCATTt	GACATAt	TTACATG	nnnnnnnnnncccttgata-----	..61...--gttgcaaccagg	gCGaagaa
B. Tau	gcacacag	gtgtgcccgtcc...3744...	ccgcagtggttaatttcattc	CCATTt	GACATAt	TTACATG	---gaacatttgattggaggaa...70...	ttgTtgcaac--ag	gcgagaag
E. Cab	gcacacag	gtgtgcccgtg...3547...	ccgcagtggttaatttcattc	CCATTt	GACATAt	TTACATG	---gaacatttgattggaggaa...56...	cccctacctc--ag	gCGaagaa
S. Sus	gcacacag	gtgtgcccaggt...3476...	ccgcagtggttaatttcattc	CCATTt	GACATAt	TTACATG	---gaacatttgattggaggaa...70...	ttgTtgcaac--ag	gcgagaag
L. Afr	ccacacag	gttgggagcttt...3478...	ccgcagtggttaatttcattc	CCATTt	GACATAt	TTACATG	---gaacatttgattggaggaa...70...	ttgTtgcaac--ag	gcgagaag
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id=442897 gene=ENSG00000215421 name=ZNF407 segment=chr18.72589320.72592991.1 type=IN VIEW

Figure 410:



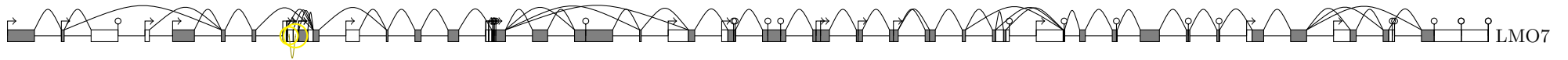
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R. Mac	atgacatg	gt-----	AAGCcaTTCTCTGAGGA	-gattt	-----	cttgatgtcagtcctt...208..	tggtgttggtag	acattaca
P. Tro	atgacatg	gt-----	AAGCcaTTCTCTGAGGA	-gattt	-----	cttgatgtcagtcctt...208..	tggtgttggtag	acattaca
P. Abe	atgacatg	gt-----	AAGCcaTTCTCTGAGGA	-gattt	-----	cttgatgtcagtcctt...208..	tggtgttggtag	acattaca
C. Jac	atgacatg	gt-----	AAGCcaTTCTCTGAGGA	-gattt	-----	cttgatgtcagtcctt...208..	tggtgttggtag	acattaca
M. Mus	atgacatg	gt-----	AAGCcaTTCTCTGAGGA	-gattt	-----	cttgatgtcagtcctt...208..	tggtgttggtag	acattaca
R. Nor	atgacatg	gt-----	AAGCcaTTCTCTGAGGA	-gattt	-----	cttgatgtcagtcctt...208..	tggtgttggtag	acattaca
C. Por	atgacatg	gt-----	AAGCcaTTCTCTGAGGA	-gattt	-----	cttgatgtcagtcctt...208..	tggtgttggtag	acattaca
O. Cun	atgacatg	gt-----	AAGCcaTTCTCTGAGGA	-gattt	-----	cttgatgtcagtcctt...208..	tggtgttggtag	acattaca
C. Fam	atgacatg	gt-----	AAGCcaTTCTCTGAGGA	-gattt	-----	cttgatgtcagtcctt...208..	tggtgttggtag	acattaca
B. Tau	atgacatg	gtaagccattctcggaggagatttcttg	ATGTcAGTcttATAT	-----	-----	cttagaggcttaagttcaat...184..	tggtgttggtag	acattaca
E. Cab	atgacatg	gt-----	AAGCcaTTCTCTGAGGA	-gattt	-----	cttgatgtcagtcctt...208..	tggtgttggtag	acattaca
S. Sus	atgacatg	gt-----	AAGCcaTTCTCTGAGGA	-gattt	-----	cttgatgtcagtcctt...208..	tggtgttggtag	acattaca
O. Avi	atgacatg	gtaagccattctcggaggagatttcttgatgtcagtccttatatccttagagg	CTTAaGTTCaATTGAG	tggttttcaagaactaagat	-----	...160..	tggtgttggtag	acattaca
L. Afr	atgacatg	gt-----	AAGCcaTTCTCTGAGGA	-gattt	-----	cttgatgtcagtcctt...208..	tggtgttggtag	acattaca
	*****	**					*****	*****

id=472009 gene=ENSG00000151338 name=MIPOL1 segment=chr14.37777295.37777553.1 type=IN

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R. Mac	atgacatg	gtaagccattctcggaggagatttcttgatgt::::	-----	TCTTAGAGGCTT	aagttcaattgagtg	gggtttcaagaactaagatgtgggaa::::	catgtctgactaacatataatgggttggtag	acat
P. Tro	atgacatg	gtaagccattctcggaggagatttcttgatgt::::	-----	TCTTAGAGGCTT	aagttcaattgagtg	gggtttcaagaactaagatgtgggaa::::	catgtctgactaacatataatgggttggtag	acat
P. Abe	atgacatg	gtaagccattctcggaggagatttcttgatgt::::	-----	TCTTAGAGGCTT	aagttcaattgagtg	gggtttcaagaactaagatgtgggaa::::	catgtctgactaacatataatgggttggtag	acat
C. Jac	atgacatg	gtaagccattctcggaggagatttcttgatgt::::	-----	TCTTAGAGGCTT	aagttcaattgagtg	gggtttcaagaactaagatgtgggaa::::	catgtctgactaacatataatgggttggtag	acat
M. Mus	atgacatg	gtaagccattctcggaggagatttcttgatgt::::	-----	TCTTAGAGGCTT	aagttcaattgagtg	gggtttcaagaactaagatgtgggaa::::	catgtctgactaacatataatgggttggtag	acat
R. Nor	atgacatg	gtaagccattctcggaggagatttcttgatgt::::	-----	TCTTAGAGGCTT	aagttcaattgagtg	gggtttcaagaactaagatgtgggaa::::	catgtctgactaacatataatgggttggtag	acat
C. Por	atgacatg	gtaagccattctcggaggagatttcttgatgt::::	-----	TCTTAGAGGCTT	aaattcaattgagtg	gggtttcaagaactaagatgtgggaa::::	catgtctgactaacatataatgggttggtag	acat
O. Cun	atgacatg	gtaagccattctcggaggagatttcttgatgt::::	-----	TCTTAGAGGCTT	aagttcaattgagtg	gggtttcaagaactaagatgtgggaa::::	catgtctgactaacatataatgggttggtag	acat
C. Fam	atgacatg	gtaagccattctcggaggagatttcttgatgt::::	-----	TCTTAGAGGCTT	aagttcaattgagtg	gggtttcaagaactaagatgtgggaa::::	catgtctgactaacatataatgggttggtag	acat
B. Tau	atgacatg	gtaagccattctcggaggagatttcttgatgt::::	taattaaaccctatattaaataaataatattaaactt	ATGTctGACTaACAT	-----	-----	-----	ataatgggttggtag
E. Cab	atgacatg	gtaagccattctcggaggagatttcttgatgt::::	-----	TCTTAGAGGCTT	aagttcaattgagtg	gggtttcaagaactaagatgtgggaa::::	catgtctgactaacatataatgggttggtag	acat
S. Sus	atgacatg	gtaagccattctcggaggagatttcttgatgt::::	-----	TCTTAGAGGCTT	aagttcaattgagtg	gggtttcaagaactaagatgtgggaa::::	catgtctgactaacatataatgggttggtag	acat
O. Avi	atgacatg	gtaagccattctcggaggagatttcttgatgt::::	-----	TTCAAGAACTAAG	-----	atgtgggaa::::	catgtctgactaacgtataatgggttggtag	acat
L. Afr	atgacatg	gtaagccattctcggaggagatttcttgatgt::::	-----	TCTTAGAGGCTT	aagttcaattgagtg	gggtttcaagaactaagatgtgggaa::::	catgtctgactaacatataatgggttggtag	acat
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id=472009 gene=ENSG00000151338 name=MIPOL1 segment=chr14.37777295.37777553.1 type=IN VIEW

Figure 411:



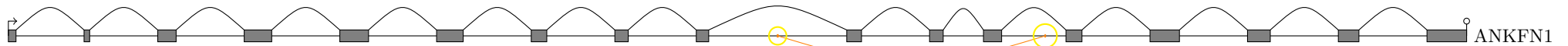
H. Sap	gtcgttct	gtaatttgtaatcatagAAACA	gAATGT	CCTC	ctcttatttcttccctgcc	-----	..42..	taaaggagag	gtgaggct	
R. Mac	gtcgttct	gtaatttgtaatcatagAAACA	gAATGT	CCTC	TCTTA	tttcttccctgccacagt	----	..36..	taaaggagag	gtgaggct
P. Tro	gtcgttct	gtaatttgtaatcatagAAACA	gAATGT	CCTC	TCTTA	tttcttccctgccacagt	----	..36..	taaaggagag	gtgaggct
P. Abe	gtcgttct	gtaatttgtaatcatagAAACA	gAATGT	CCTC	TCTTA	tttcttccctgccacagt	----	..36..	taaaggagag	gtgaggct
C. Jac	gtcgttct	gtaatttgtaatcatagAAACA	gAATGT	CCTC	TCTTA	tttcttccctgccacagt	----	..36..	taaaggagag	gtgaggct
C. Por	gtcgttct	gtaatttgtaatcatagAAACA	gAATGT	CCTC	TCTTATTT	ttcctgccacatttctg	..32..	taaaggagag	gtgaggct	
O. Cun	gtcgttct	gtaatttgtaatcatagAAACA	gAATGT	CCTC	TCTG	attccttccctgccacagt	----	..37..	taaaggagag	gtgaagct
C. Fam	gtcgttct	gtaatttgtaacacagAAACA	gAATGT	CCTC	TCCTGTTT	cttccctgccacagtttct	..33..	taaaggagag	gtgaggct	
F. Cat	gtcgttct	gtaatttgtaatcatagAAACA	gAATGT	CCTC	TCTTA	tttcttccctgccacagt	----	..36..	taaaggagag	gtgaggct
B. Tau	gtcgttct	gtaatttgtaatcatagAAACA	gAATGT	CCTC	TCTC	ccttccctgccacagt	----	..37..	taaaggagag	gtgaagct
S. Sus	gtcgttct	gtaatttgtaatcatagAAACA	gAATGT	CCTC	TCTTA	tttcttccctgccacagt	----	..36..	taaaggagag	gtgaggct
O. Avi	gtcgttct	gtaatttgtaatcatagAAACA	gAATGT	CCTC	TCTC	ccttccctgccacagt	----	..37..	taaaggagag	gtgaagct
L. Afr	atcgttt	ataatttgtaatcatagAAACA	gAATGT	CCTC	ctcttatttcttccctgcc	-----	..42..	taaaggagag	gtgaggct	
	*** *	*****	*****	*****	* * *****			*** *****	*** **	

id=380250 gene=ENSG00000136153 name=LM07 segment=chr13.76334589.76334695.1 type=AN

H. Sap	gaggagag	gtgaggcttgccgtgcaaagc	TGGGA	aGAGGGCGTTTGT	TTCgagagcagagctgacatca	..26..	ggcacttgtcct	gtaacagg
R. Mac	gaggagag	gtgaggcttgccgtgcaaagc	TGGGA	aGAGGGCGTTTGT	TTCgagagcagagctgacatca	..26..	ggcacttgtcct	gtaacagg
P. Tro	gaggagag	gtgaggcttgccgtgcaaagc	TGGGA	aGAGGGCGTTTGT	TTCgagagcagagctgacatca	..26..	ggcacttgtcct	gtaacagg
P. Abe	caggagag	gtgaggcttgccgtgcaaagc	TGGGA	aGAGGGCGTTTGT	TTCgagagcagagctgacatca	..26..	ggcacttgtcct	gtaacagg
C. Jac	gaggagag	gtgaggcttgccgtgcaaagc	TGGGA	aGAGGGCGTTTGT	TTCgagagcagagctgacatca	..26..	ggcacttgtcct	gtaacagg
C. Por	gaggagag	gtgaggcttgcgtgcGAAG	cTGGGA	aGAGGGCGTTTGT	TTCgagagcagagctgacatca	..26..	ggcacttgtcct	ataacagg
O. Cun	gaggagag	gtgaagcttgcgtgcGAAG	cTGGGA	aGAGGGCGTTTGT	TTCgagagcagagctgacatca	..26..	ggcacttgtcct	gtaacagg
C. Fam	gaggagag	gtgaggcttgcgtgcaAAG	CtGGGA	aGAGGGCGTTTGT	TTCgagagcagagctgacatca	..26..	ggcacttgtcct	gtaacagg
F. Cat	gaggagag	gtgaggcttgcgtgcaAAG	CtGGGA	aGAGGGCGTTTGT	TTCgagagcagagctgacatca	..26..	ggcacttgtcct	gtaacagg
B. Tau	gaggagag	gtgaagcttgcgtgcaaagc	TGGGA	aGAGGGCGTTTGT	TTCgagagcagacctgacatca	..26..	ggcacttgtcct	ataacagg
S. Sus	gaggagag	gtgaggcttgcgtgcaaagc	TGGGA	aGAGGGCGTTTGT	TTCgagagcagagctgacatca	..26..	ggcacttgtcct	ataacagg
O. Avi	gaggagag	gtgaagcttgcgtgcaaagc	TGGGA	aGAGGGCGTTTGT	TTCgagagcagacctgacatca	..26..	ggcacttgtcct	ataacagg
L. Afr	gaggagag	gtgaggcttgcgtgcaaagc	TGGGA	aGAGGGCGTTTGT	TTCgagagcagagctgacatca	..26..	ggcacttgtcct	ataacagg
	*****	*** **	*** **	*****	*****		*** *****	*****

id=380251 gene=ENSG00000136153 name=LM07 segment=chr13.76334696.76334794.1 type=AN VIEW

Figure 412:



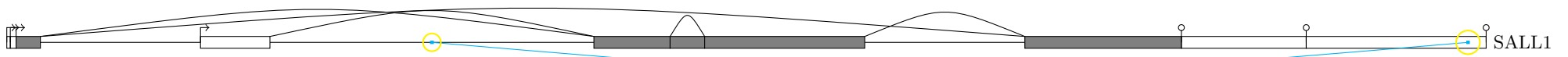
H. Sap	tccttcta	gtaggtggtggc...4480...-tctttccttgaaagaaatg	TCAAtTTGGccAAAAG	tgtgaacctacaataaaaag...429...-tttggtcaatag	actggaaa
R. Mac	tccttcta	gtaggtggtggc...4480...-tctttccttgaaagaaatg	TCAAtTTGGccAAAAG	tgtgaacctacaataaaaag...429...-tttggtcaatag	actggaaa
P. Tro	tccttcta	gtaggtggtggc...4480...-tctttccttgaaagaaatg	TCAAtTTGGccAAAAG	tgtgaacctacaataaaaag...429...-tttggtcaatag	actggaaa
P. Abe	tccttcta	gtaggtggtggc...4480...-tctttccttgaaagaaatg	TCAAtTTGGccAAAAG	tgtgaacctacaataaaaag...429...-tttggtcaatag	actggaaa
M. Mus	ccctcca	gtaggtggtgac...4480...-tctttccttgaaagaaatg	TCAAtTTGGccAAAAG	tgtgaacctacaataaaaag...429...-tttggtcaatag	actggaaa
R. Nor	ccctcca	gtaggtggtaac...4475...-tctttccttgaaagaaatg	TCAAtTTGGccAAAAG	tgtgaacctacaataaaaag...434...-tttggtcaatag	actggaaa
C. Por	gccttcta	gtaggtggtggc...4478...-tctttccttgaaagaaatg	TCAAtTTGGccAAAAG	tgtgaacctacaataaaaag...431...-tttggtcaatag	actggaaa
O. Cun	tccttcta	gtaggtggtggc...4482...-tctttccttgaaagaaatg	TCAAtTTGGccAAAAG	tgtgaacctacaataaaaag...427...-cttggtcaatag	actggaaa
C. Fam	gccttcta	gtaggtggtgaa...4483...-tctttccttgaaagaaatg	TCAAtTTGGccAAAAG	tgtgaacctacaataaaaag...426...-tttggtc-atag	actggaaa
F. Cat	gccttcca	gtaggtggtggc...4470...-tctttccttgaaagaaatg	TCAAtTTGGccAAAAG	tgtgaacctacaataaaaag...439...-tttggtcaatag	actggaaa
B. Tau	tccttcta	gtaggtggtggc...4480...-tctttccttgaaagaaatg	TCAAtTTGGccAAAAG	tgtgaacctacaataaaaag...429...-tttggtcaatag	actggaaa
E. Cab	tccttcta	gtaggtggtggc...4488...-tctttccttgaaagaaatg	TCAAtTTGGccAAAAG	tgtgaacctacaataaaaag...420...-tttggtcaacag	actggaaa
S. Sus	tccttcta	gtaggtggtggc...4500...-tctttccttgaaagaaatg	TCAAtTTGGccAAAAG	tgtgaacctacaataaaaag...409...-tttggtcaatag	actggaaa
	** ** *	***** *	*****	***** * **	*****

id=711802 gene=ENSG00000153930 name=ANKFN1 segment=chr17_54520295_54526439_1 type=IN

H. Sap	tcacgaag	gtatactaagtt...273...cgtttcattaacattcagat	CTTTTCCAATTGG	acagagatcaaaaagttggtt...122...cttctttgag	ctgtcttg
R. Mac	tcacgaag	gtatactaaatt...275...cgtttcattagcattcagat	CTTTTCCAATTGG	acagagatcaaaaagttggtt...122...cttctttgag	ctgtcttg
P. Tro	tcacgaag	gtatactaagtt...273...cgtttcattaacattcagat	CTTTTCCAATTGG	acagagatcaaaaagttggtt...122...cttctttgag	ctgtcttg
P. Abe	tcacgaag	gtatgctaagtt...273...cgtttcattagcattcagat	CTTTTCCAATTGG	acagagatcaaaaagttggtt...122...cttctttgag	ctgtcttg
M. Mus	tcatgaag	gtacactgagtt...279...tgtttcattagcattcagat	CTTTTCCAATTGG	acagagatcaaaaagttggtt...129...cttctttgag	ctgtcttg
R. Nor	tcatgaag	gtacactgagtt...281...tatttcattagcattcagat	CTTTTCCAATTGG	acagagatcaaaaagttggtt...148...cctctttgag	ctgtcttg
C. Por	tcacaaag	gtatactgaatt...285...tgtttcattaacattcagat	CTTTTCCAATTGG	acagagatcaaaaagttggtt...122...cttctttgag	ctgtcctg
O. Cun	tcacaaag	gtatactgagtt...271...tgtttcattaacattcagat	CTTTTCCAATTGG	acagagatcaaaaagttggtt...122...cttctttgag	ctgtcttg
C. Fam	tcacaaag	gtatactactcg...276...tatttcattaacattcagat	CTTTTCCAATTGG	atagagatcaaaaagttggtt...124...cttctttgag	ctgtcttg
F. Cat	tcacaaag	gtatactgagtt...261...tatttcattaacattcagat	CTTTTCCAATTGG	acagagatcaaaaagttggtt...124...cttctttgag	ctgtcttg
B. Tau	tcacaaag	gtatcctgagtt...277...tgtttcattaacattcagat	CTTTTCCAATTGG	acagagatcaaaaagttggtt...122...gttctttgag	ctgtcctg
E. Cab	tcacgaag	gtatactgagtt...269...tgtttcattaacattcagat	CTTTTCCAATTGG	cagagatcaaaaagttggtt...121...cttctttgag	ctgtcttg
S. Sus	tcacaaag	gtatcctgagtt...278...tgtttcattaacattcagat	CTTTTCCAATTGG	acagagatcaaaaagttggtt...122...cttctttgag	ctgtcttg
	*** **	***** **	*****	* *****	***** **

id=711808 gene=ENSG00000153930 name=ANKFN1 segment=chr17_54534751_54535223_1 type=IN VIEW

Figure 413: CS=7.8



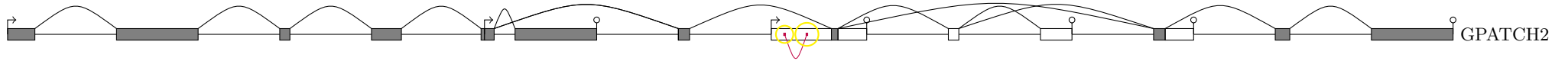
H. Sap	tctt-tctg	gtcggtatg	gc...4536...tagtgacagaacaaactgtc	ACAGaTATCTTTG	agtcggttg	aaaatgaataa...376...tgacattt	gtag	gagacaca
R. Mac	tctt-tacg	gtctgtatg	gc...4531...tagtgacagaacaaactgtc	ACAGaTATCTTTG	agtcagttg	aaaatgaataa...381...tgacctt	gtag	gagacaca
P. Tro	tctt-tctg	gtcggtatg	gc...4529...tagtgacagaacaaactgtc	ACAGaTATCTTTG	agtcggttg	aaaatgaataa...383...tgacattt	gtag	gagacaca
P. Abe	tctt-tctg	gtcggtatg	gc...4532...tagtgacagaacaaactgtc	ACAGaTATCTTTG	agtcggttg	aaaatgaataa...380...tgacattt	gtag	gagacaca
C. Jac	tctt-aatg	gtcggtatg	ctc...4528...tagtgacagaacaaactgtc	ACAGaTATCTTTG	agtcagttg	aaaatgaataa...384...tgatg	ttgtag	gagacaca
M. Mus	tcgg-gctt	ggatgtgtg	cac...4556...tagtgacagaacagactgtc	ACAGaTATCTTTG	catcagttg	aaaatgaataa...356...tgatg	ttgtag	gggacaca
R. Nor	tcgg-actt	ggatgtgtg	ctc...4561...tagtgacagaacagactgtc	ACAGaTATCTTTG	catcagttg	aaaatgaataa...351...tgatg	ttcatag	gggacaca
C. Por	tcct-gaga	tttggtttt	cg...4509...tagtgacagaacaaactgtc	ACAGaTATCTTTG	aaacggttg	aaaatgaataa...403...taatg	ttgtag	gagacatc
O. Cun	tgctccaga	tttgggtctc	g...4488...tagtgacagaacaaactgtc	ACAGaTATCTTTG	gatcagttg	aaaatgaataa...424...tgg	gttcgag	gagacacg
C. Fam	tctt-taca	ttgagtg	tg...4530...tagtgacagaacaaactgtc	ACAGaTATCTTTG	aatcagttg	aaaatgaataa...382...tgat	attgtag	gagacaca
B. Tau	tctt-tagc	ctcgggtcg	ctc...4520...tagtgacagaacaaactgtc	ACAGaTATCTTTG	aatcagttg	aaaatgaataa...392...tcatg	ttgtag	gagacaca
E. Cab	tcct-tagc	ttcgggtcg	ctc...4530...tagtgacagaacaaactgtc	ACAGaTATCTTTG	aatcagttg	aaaatgaataa...382...tgatg	ttgtag	gagacacg
S. Sus	tctt-tagc	ctcgggtcg	ctc...4529...tagtgacagaacaaactgtc	ACAGaTATCTTTG	aatcagttg	aaaatgaataa...383...tgacg	ttgtag	gagacacg
O. Avi	tctt-tagc	gtcgggtcg	ctc...4520...tagtgacagaacaaactgtc	ACAGaTATCTTTG	aatcagttg	aaaatgaataa...392...tcatg	ttgtag	gagacaca
	*		** *	*****	*****	*	*****	* ** **

id=600522 gene=ENSG0000103449 name=SALL1 segment=chr16.51176057.51184291.-1 type=IN

H. Sap	tgtacact	ttgatcctg	ctg...597...catttaacttacta	acaaCAGAGATACTGT	aattttact	caagtaatcaa...26...caaa	actgtg	tctgtgtt
R. Mac	tgtacact	ttgatcctg	ctg...594...catttaacttacta	acaaCAGAGATACTGT	aattttact	caagtaatcaa...27...cag	tactgtg	tctgtgtt
P. Tro	tgtacact	ttgatcctg	ctg...599...catttaacttacta	acaaCAGAGATACTGT	aattttact	caagtaatcaa...26...caaa	actgtg	tctgtgtt
P. Abe	tgtacact	ttgatcctg	ctg...596...catttaacttacta	acaaCAGAGATACTGT	aattttact	caagtaatcaa...26...caaa	actgtg	tctgtgtt
C. Jac	tgtacact	ttgatcctg	ctg...604...catttaacttacta	acagCAGAGATACTGT	aattttact	caagtaatcaa...27...cca	aatgtg	tctgtgtt
M. Mus	tgtacact	ttgatcctg	ctg...637...catttaacttacta	acaaCAGAGATACTGT	aattttact	caagtaatcaa...26...caac	atattgtg	tctgtgtt
R. Nor	tgtacact	ttgatcctg	ctg...659...catttaacttacta	acaaCAGAGATACTGT	aattttact	caagtaatcaa...26...caac	actgtg	tctgtgtt
C. Por	tgtacact	ttgatcctg	ctg...602...catttaacttacta	acaaCAGAGATACTGT	aattttact	caagtaatcaa...27...caac	actgtg	tctgtgtt
O. Cun	tgtacact	ttgatcctg	ctg...630...catttaacttacta	acaaCAGAGATACTGT	aattttact	caagtaatcaa...28...caaa	atcccgtg	tctgtgtt
C. Fam	tgtacact	ttgatcctg	ctg...623...catttaacttacta	acaaCAGAGATACTGT	aattttact	caagtaatcaa...28...caaa	actgtg	tctgtgtt
B. Tau	tgtatact	ttgatcctg	ctg...610...catttaacttacta	acaaCAGAGATACTGT	aattttact	caagtaatcaa...28...caaa	actgtg	tctgtgtt
E. Cab	tgtacact	ttgatcctg	ctg...596...catttaacttacta	acaaCAGAGATACTGT	aattttact	caagtaatcaa...27...caaa	actgtg	tctgtgtt
S. Sus	tgtacact	ttgatcctg	ctg...656...catttaacttacta	acaaCAGAGATACTGT	aattttact	caagtaatcaa...28...caaa	actgtg	tctgtgtt
O. Avi	tgtatact	ttgatcctg	ctg...605...catttaacttacta	acaaCAGAGATACTGT	aattttact	caagtaatcaa...27...caaa	actgtg	tctgtgtt
	**** *	*****	*****	*****	*****	**	*	*

id=600529 gene=ENSG0000103449 name=SALL1 segment=chr16.51169886.51170584.-1 type=E3 VIEW

Figure 414: CS=4.2



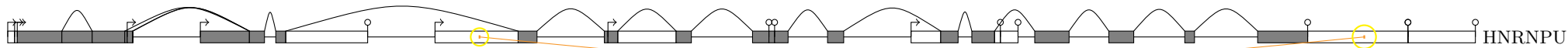
H. Sap	ccaacaat	caaagggtcataatgtgttgaatgatgctataattaagttgtggtaaataatgatagc	ATTG	TAGG	TTT	Aa	ACCAG	aa	TTGAT	tcataaaatgaatacagtcc...253...	tttcctctgcag	ccattggt		
R. Mac	ccaacaat	caaaaggtcataaattgttgaatgatgctataattaagttgtggtaaataatgatagc	ATTG	TAGA	TTT	Aa	ACCAG	aa	TTGAT	tcataaaatgaatacagtcc...257...	tttcctctgcag	ccattggt		
P. Tro	ccaacaat	caaagggtcataatgtgttgaatgatgctataattaagttgtggtaaataatgatagc	ATTG	TAGA	TTT	Aa	ACCAG	aa	TTGAT	tcataaaatgaatacagtcc...253...	tttcctctgcag	ccattggt		
P. Abe	ccaacaat	caaagggtcataaattgttgaatgatgctataattaagttgtggtaaataatgatagc	ATTG	TAGA	TTT	Aa	ACCAG	aa	TTGAT	tcataaaatgaatacagtcc...253...	tttcctctgcag	ccattggt		
C. Jac	ccagcaat	caaaaggtcataaattgttgaatgatgctataattaagttgtggtaaataatgatagc	ATTG	TAGA	TTT	Aa	ACCAG	aa	TTGAT	tcataaaatgaatacagtcc...253...	tttcctctgcag	ccattggt		
M. Mus	ccaataat	caaaa-gtcataaattggcataatgatgctataattaagttgtggcaaataatgatagc	ATTG	TAGA	TTT	Aa	ACCAG	aa	TTGAT	ttgtaaaatgaacacagtcc...254...	ttctctccacag	ccactggt		
R. Nor	ctaataat	caaaa-gtcataaattggcataatgatgctataattaagttgtggcaaataatgatagc	ATTG	TAGA	TTT	Aa	ACCAG	aa	TTGAT	ttgtaaaatgaacacagtcc...252...	ttctctccacag	ccactggt		
C. Por	ccaacaat	cagaaggtcataaattgttataatgatgctataattaagttgtggtaaataatgatagc	ATTG	TAGA	TTT	Aa	ACCAG	aa	TTGAT	tcataaaatgaatgcagtcc...255...	tttctctgcag	ccactggt		
O. Cun	tcaacaac	caaaaggtcataaattgttgaatgatgctataattaagttgtggtaaataatgatagc	ATTG	TAGA	TTT	Aa	ACCAG	aa	TTGAT	tcataaaatgaatacagtcc...257...	tttcctctgcag	ccattggt		
F. Cat	ccagcaat	ccagaagtcataaattgttgaacgatgctataattaagttgtggtaaataatgatagc	ATTG	TAGA	TTT	Aa	ACCAG	aa	TTGAT	tcataaaatggatacagtcc...257...	tttcctctgcag	ccattggt		
E. Cab	ccaacaat	cagaaggtcataaattgttgaatggctataattaagttgtggtaaataatgatagc	GTTG	TAGA	TTT	Aa	ACCAG	aa	TTGAT	tcataaaatgaatacagtcc...260...	tttcctctgcag	acattggt		
S. Sus	gctgcaat	caaaaggtcataaattgttgaatgatgctataattaagttgtggtaaataatgatagc	ATTG	TAGA	TTT	Aa	ACCAG	aa	TTGAT	tcataaaatgaatacagtcc...252...	tttcctctgcag	ccattggt		
L. Afr	ccaacaat	caaatggtcataaattgttgaatgacactgtaattaagttgtggtaaataatgatagc	ATTG	TAGA	TTT	Aa	ACCAG	aa	TTGAT	tcgtaaaatgaatacagtcc...257...	tttcctctgcag	ccattggt		
	**	*	*	*	*	*	*	*	*	*	*	**	**	**

id=389921 gene=ENSG0000092978 name=GPATCH2 segment=chr1_217671738_217672106_-1 type=AN

H. Sap	ccaacaat	caaagggtcata-...170...atgagcacttttacagttct	GTCAA	aa	TTGGT	c	TAAGTCTAGA	AT	tcataaaatgaatacagtcc...110...	tttcctctgcag	ccattggt		
R. Mac	ccaacaat	caaaaggtcata-...170...atgagcacttttacagttct	GTCAA	aa	TTGGT	c	TAAGTCTAGA	AT	tcataaaatgaatacagtcc...114...	tttcctctgcag	ccattggt		
P. Tro	ccaacaat	caaagggtcata-...170...atgagcacttttacagttct	GTCAA	aa	TTGGT	c	TAAGTCTAGA	AT	tcataaaatgaatacagtcc...110...	tttcctctgcag	ccattggt		
P. Abe	ccaacaat	caaagggtcata-...170...atgagcacttttacagttct	GTCAA	aa	TTGGT	c	TAAGTCTAGA	AT	tcataaaatgaatacagtcc...110...	tttcctctgcag	ccattggt		
C. Jac	ccagcaat	caaaaggtcata-...170...atgagcacttttacagttct	GTCAA	aa	TTGGT	c	TAAGTCTAGA	AT	tcataaaatgaatacagtcc...110...	tttcctctgcag	ccattggt		
M. Mus	ccaataat	caaaa-gtcata-...169...atgagcacttttacagttct	GTCAA	aa	TTGGT	c	TAAGTCTAGA	AT	tcataaaatgaatacagtcc...111...	ttctctccacag	ccactggt		
R. Nor	ctaataat	caaaa-gtcata-...169...atgagcacttttacagttct	GTCAA	aa	TTGGT	c	TAAGTCTAGA	AT	tcataaaatgaatacagtcc...109...	ttctctccacag	ccactggt		
C. Por	ccaacaat	cagaaggtcata-...170...atgagcacttttacagttct	GTCAA	aa	TTGGT	c	TAAGTCTAGA	AT	tcataaaatgaatacagtcc...112...	tttctctgcag	ccactggt		
O. Cun	tcaacaac	caaaaggtcata-...170...atgagcacttttacagttct	GTCAA	aa	TTGGT	c	TAAGTCTAGA	AT	tcataaaatgaatacagtcc...114...	tttcctctgcag	ccattggt		
F. Cat	ccagcaat	ccagaagtcata-...170...atgagcacttttacagttct	GTCAA	aa	TTGGT	c	TAAGTCTAGA	AT	tcataaaatgaatacagtcc...114...	tttcctctgcag	ccattggt		
E. Cab	ccaacaat	cagaaggtcata-...170...atgagcacttttacagttct	GTCAA	aa	TTGGT	c	TAAGTCTAGA	AT	tcataaaatgaatacagtcc...117...	tttcctctgcag	acattggt		
S. Sus	gctgcaat	caaaaggtcata-...166...atagcagcgttacatgtct	GTCAA	aa	TTGGT	c	TAAGTCTAGA	AT	tcataaaatgaatacagtcc...113...	tttcctctgcag	ccattggt		
L. Afr	ccaacaat	caaatggtcata-...170...atgagcgtcttacatcttct	GTCAA	aa	TTGGT	c	TAAGTCTAGA	AT	tcataaaatgaatacagtcc...122...	tttcctctgcag	ccattggt		
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Figure 415:



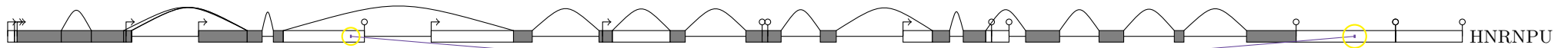
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Figure 417: CS=3.9



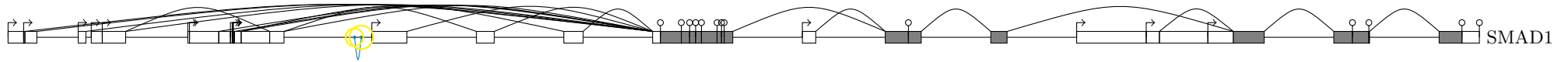
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Figure 418:



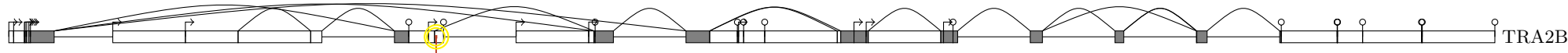
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Figure 419:



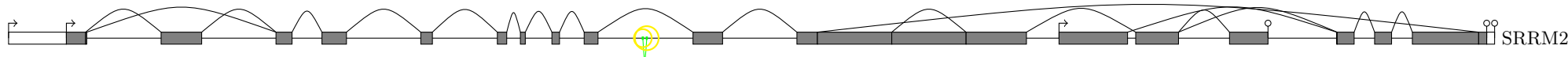
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Figure 420:



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Figure 422:



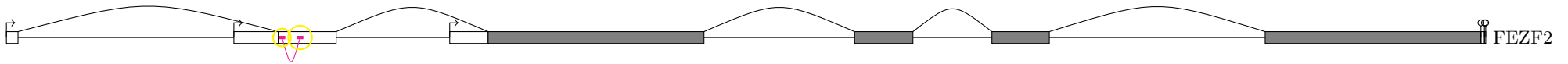
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Figure 423:



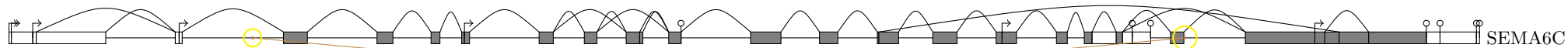
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P. Abe	aCTTCaaG	TGActTCAT	gtgatgtcagctgaatgtaa...93...tgggggaaagag	gtaaatgc
C. Jac	aCTTCaaG	TGActTCAT	gtgatgtcagctgaatgtaa...93...tgggggaaagag	gtaaatgc
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R. Nor	aCTTCaaG	TGActTCAT	gtgatgtcagctgaatgtaa...93...tgggggaaaaag	gtaaaagc
C. Por	aCTTCaaG	TGActTCAT	gtgatgtcagctgagtgtaa...93...cggcggaaagag	gtaaacgc
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C. Fam	aCTTCaaG	TGActTCAT	gtgatgtcagctgaatgtaa...93...tgggggaaagag	gtaaatgc
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Figure 424:



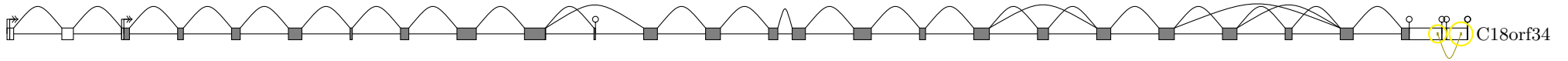
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S. Sus	cactccag	gtaaggaaaggg...1447...-gggggagcgggtgtgtcctg-----	TCCTTACCTGGGGT	cat-gctggcag--gcctcacac...181...gccttctttcag	ggccagca
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C. Fam	cACTCAGG	GTAAGGG	ggctcgctgggaggacagg-----...386...-ctcggtcagcag	gcgtgcgc
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Figure 425: CS=11.7



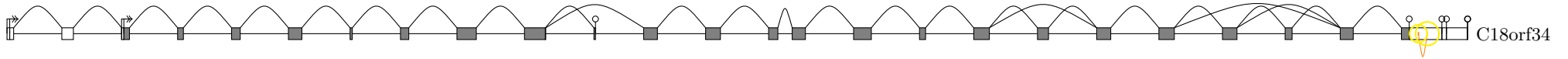
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M.Mus	atgactaa	ccaacaaccaa...243...ctgataattaatctatgtca	CCATtAATTggAAGAgAGAATA	attactggcgggtgttgacagtgactgttcgcttccccaga	tttccca
R.Nor	atgactaa	ccaacaaccaa...245...ctgataattaatctatgtca	CCATtAATTggAAGAgAGAATA	attactggcgggtgttgacagtgactgttcgcttccccaga	tttccca
O.Cun	atggttaa	gcaacaaccaa...245...ctgataattaatctatgtca	CCATtAATTggAAGAgAGAATA	attactggcgggtgttgacagtgactgttcgcttccccaga	tttccca
C.Fam	atggttaa	gcaacaaccaa...245...ctgataattaatctatgtca	CCATtAATTggAAGAgAGAATA	attactggcgggtgttgacagtgactgttcgcttccccaga	tttccca
F.Cat	atggttaa	gcaacaaccaa...245...ctgataattaatctatgtca	CCATtAATTggAAGAgAGAATA	attactggcgggtgttgacagtgactgttcgcttccccaga	tttccca
B.Tau	atggttaa	gcaacaaccaa...245...ctgataattaatctatgtca	CCATtAATTggAAGAgAGAATA	attactggcgggtgttgacagtgactgttcgcttccccaga	tttccca
E.Cab	atggttaa	gcaacaaccaa...245...ctgataattaatctatgtca	CCATtAATTggAAGAgAGAATA	attactggcgggtgttgacagtgactgttcgcttccccaga	tttccca
S.Sus	atggttaa	acaacaaccaa...245...ctgataattaatctatgtca	CCATtAATTggAAGAgAGAATA	attactggcgggtgttgacagtgactgttcgcttccccaga	tttccca
L.Afr	atggttaa	gcaacaaccaa...245...ctgataattaatctatgtca	CCATtAATTggAAGAgAGAATA	attactggcgggtgttgacagtgactgttcgcttccccaga	tttcccg
	*** **	***** **	*****	***** **	*****

id=638111 gene=ENSG00000166960 name=C18orf34 segment=chr18.30517636.30517974_-1 type=E3

H.Sap	cagtactt	aaagtttgtgta...101...ctctctcaatcactcctcaa	TGTTCTaTCTTAATT	ttGTGGaagtttaaagttttcaatga...32...atgcttcatttt	gtccatgg
R.Mac	cagtactt	aaagtttgtgta...101...ctctctcaatcactcctcaa	TGTTCTaTCTTAATT	ttGTGGaagtttaaagttttcaatga...32...atgcttcatttt	gtccatgg
P.Tro	cagtactt	aaagtttgtgta...101...ctctctcaatcactcctcaa	TGTTCTaTCTTAATT	ttGTGGaagtttaaagttttcaatga...32...atgcttcatttt	gtccatgg
P.Abe	cagtactt	aaagtttgtgta...101...ctctctcaatcactcctcaa	TGTTCTaTCTTAATT	ttGTGGaagtttaaagttttcaatga...32...atgcttcatttt	gtccatgg
C.Jac	cagtactt	aaagtttgtgta...101...ctctctcaatcactcctcaa	TGTTCTaTCTTAATT	ttGTGGaagtttaaagttttcaatga...32...atgcttcatttt	gtccatgg
M.Mus	cagtactt	aaagtttgtgta...101...ctctctcaatcactcctcaa	TGTTCTaTCTTAATT	ttGTGGaagtttaaagttttcaatga...32...atgcttcatttt	gtccatgg
R.Nor	cagtactt	aaagtttgtgta...101...ctctctcaatcactcctcaa	TGTTCTaTCTTAATT	ttGTGGaagtttaaagttttcaatga...32...atgcttcatttt	gtccatgg
O.Cun	cagtactt	aaagtttgtgta...100...ctctctcaatcactcctcaa	TGTTCTaTCTTAATT	ttGTGGaagtttaaagttttcaatga...32...atgcttcatttt	gtccatgg
C.Fam	cagtactt	aaagtttgtgta...101...ctctctcaatcactcctcaa	TGTTCTaTCTTAATT	ttGTGGaagtttaaagttttcaatga...32...atgcttcatttt	gtccatgg
F.Cat	cagtactt	aaagtttgtgta...101...ctctctcaatcactcctcaa	TGTTCTaTCTTAATT	ttGTGGaagtttaaagttttcaatga...32...atgcttcatttt	gtccatgg
B.Tau	cagtactt	aaagtttgtgta...101...ctctctcaatcactcctcaa	TGTTCTaTCTTAATT	ttGTGGaagtttaaagttttcaatga...32...atgcttcatttt	gtccatgg
E.Cab	cagtactt	aaagtttgtgta...101...ctctctcaatcactcctcaa	TGTTCTaTCTTAATT	ttGTGGaagtttaaagttttcaatga...32...atgcttcatttt	gtccatgg
S.Sus	cagtactt	aaagtttgtgta...101...ctctctcaatcactcctcaa	TGTTCTaTCTTAATT	ttGTGGaagtttaaagttttcaatga...32...atgcttcatttt	gtccatgg
L.Afr	aaagtttgtgta...99...ctctctcaatcactcctcaa	TGTTCTaTCTTAATT	ttGTGGaagtttaaagttttcaatga...32...atgcttcatttt	gtccatgg	gtccatgg
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id=638113 gene=ENSG00000166960 name=C18orf34 segment=chr18.30517371.30517588_-1 type=E3 VIEW

Figure 426:



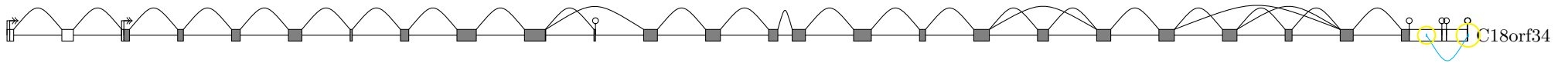
H. Sap	atggttaa	gcaacaaccaa...48...ataacagtgaattggacat	TCACCTGTTTgc	CATT	tcacacttccatgaacgaaa...211...cgcttcccaga	tttcccta
R. Mac	atggttaa	gcaacaaccaa...48...ataacagtgaattggacat	TCACCTGTTTgc	CATT	tcacacttccatgaacgaaa...211...cgcttcccaga	tttcccca
P. Tro	atggttaa	gcaacaaccaa...48...ataacagtgaattggacat	TCACCTGTTTgc	CATT	tcacacttccatgaacgaaa...211...cgcttcccaga	tttcccta
P. Abe	atggttaa	gcaacaaccaa...48...ataacagtgaattggacat	TCACCTGTTTgc	CATT	tcacacttccatgaacgaaa...211...cacttcccaga	tttcccca
C. Jac	atggttaa	gcaacaaccaa...48...ataacagtgaattggacat	TCACCTGTTTgc	CATT	tcacacttccatgaacgaaa...211...cgcttcccaga	tttcccca
M. Mus	atgactaa	ccaacaaccaa...48...ataacagtgaattggacat	TCACCTGTTTgc	CATT	tcacacttccatggacgaaa...209...ggcttcccaga	tttcccca
R. Nor	atgactaa	ccaacaatcaa...48...ataacagtgaattggacat	TCACCTGTTTgc	CATT	tcacacttccatggacgaaa...211...ggcttcccaga	tttcccca
O. Cun	atggttaa	gcaacaaccaa...48...ataacagtgaattggacat	TCACCTGTTTgc	CATT	tcacacttccatggacgaaa...211...cgcttcccaga	tttcccca
C. Fam	atggttaa	gcaacaaccaa...48...ataacagtgaattggacat	TCACCTGTTTgc	CATT	tcacacttccatggacgaaa...211...cgcttcccaga	tttcccca
F. Cat	atggttaa	gcaacaaccaa...48...ataacagtgaattggacat	TCACCTGTTTgc	CATT	tcacacttccatggacgaaa...211...cgcttcccaga	tttcccca
B. Tau	atggttaa	gcaacaaccaa...48...atagcagtgaattggacat	TCACCTGTTTgc	CATT	tcacacttccatggacgaaa...211...cgcttcccaga	tttcccca
E. Cab	atggttaa	gcaacaaccaa...48...ataacagtgaattggacat	TCACCTGTTTgc	CATT	tcacacttccatggacgaaa...211...cgcttcccaga	tttcccca
S. Sus	atggttaa	acaacaaccaa...48...atagcagtgaattggacat	TCACCTGTTTgc	CATT	tcacacttccatggacgaaa...211...cgcttcccaga	tttcccca
L. Afr	atggttaa	gcaacaaccaa...48...ataacagtgaattggacat	TCACCTGTTTgc	CATT	tcacacttccatggacgaaa...211...cacttcccaga	tttcccgg
	*** **	***** **	*** *****	*****	*****	*****

id=638111 gene=ENSG00000166960 name=C18orf34 segment=chr18_30517636_30517974_-1 type=E3

H. Sap	atggttaa	gcaacaaccaa...141...actcagcaaatccataac	AATGAAACAGGTGA	ctttcatgctgctgtcagga...120...cgcttcccaga	tttcccta
R. Mac	atggttaa	gcaacaaccaa...141...actcagcaaatccataac	AATGAAACAGGTGA	ctttcatgctgctgtcagga...120...cgcttcccaga	tttcccca
P. Tro	atggttaa	gcaacaaccaa...141...actcagcaaatccataac	AATGAAACAGGTGA	ctttcatgctgctgtcagga...120...cgcttcccaga	tttcccta
P. Abe	atggttaa	gcaacaaccaa...141...actcagcaaatccataac	AATGAAACAGGTGA	ctttcatgctgctgtcagga...120...cacttcccaga	tttcccca
C. Jac	atggttaa	gcaacaaccaa...141...actcagcaaatccataac	AATGAAACAGGTGA	ctttcatgctgctgtcagga...120...cgcttcccaga	tttcccca
M. Mus	atgactaa	ccaacaaccaa...139...acttacagcaaatccataac	AATGAAACAGGTGA	ctttcatgcccgtgtcagga...120...ggcttcccaga	tttcccca
R. Nor	atgactaa	ccaacaatcaa...141...acttacagcaaatccataac	AATGAAACAGGTGA	ctttcatgcccgtgtcagga...120...ggcttcccaga	tttcccca
O. Cun	atggttaa	gcaacaaccaa...141...acttacagcaaatccataac	AATGAAACAGGTGA	ctttcatgctgctgtcagga...120...cgcttcccaga	tttcccca
C. Fam	atggttaa	gcaacaaccaa...141...acttacagcaaatccataac	AATGAAACAGGTGA	ctttcatgctgctgtcagga...120...cgcttcccaga	tttcccca
F. Cat	atggttaa	gcaacaaccaa...141...acttacagcaaatccataac	AATGAAACAGGTGA	ctttcatgctgctgtcagga...120...cgcttcccaga	tttcccca
B. Tau	atggttaa	gcaacaaccaa...141...acttacagcaaatccataac	AATGAAACAGGTGA	ctttcatgctgctgtcagga...120...cgcttcccaga	tttcccca
E. Cab	atggttaa	gcaacaaccaa...141...acttacagcaaatccataac	AATGAAACAGGTGA	ctttcatgctgctgtcagga...120...cgcttcccaga	tttcccca
S. Sus	atggttaa	acaacaaccaa...141...acttacagcaaatccataac	AATGAAACAGGTGA	ctttcatgctgctgtcagga...120...cgcttcccaga	tttcccca
L. Afr	atggttaa	gcaacaaccaa...141...acttacagcaaatccataac	AATGAAACAGGTGA	ctttcatgctgctgtcagga...120...cacttcccaga	tttcccgg
	*** **	***** **	*** *****	*****	*****

id=638111 gene=ENSG00000166960 name=C18orf34 segment=chr18_30517636_30517974_-1 type=E3 VIEW

Figure 427:



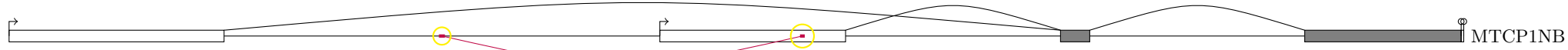
H. Sap	atggttaa	gcaacaaccaa...132...cactcttttacttacagcaa	ATCCATAACAATGAA	acaggtgactttcatgctgc...128...cgcttccccaga	tttccta
R. Mac	atggttaa	gcaacaaccaa...132...cactcttttacttacagcaa	ATCCATAACAATGAA	acaggtgactttcatgctgc...128...cgcttccccaga	tttccca
P. Tro	atggttaa	gcaacaaccaa...132...cactcttttacttacagcaa	ATCCATAACAATGAA	acaggtgactttcatgctgc...128...cgcttccccaga	tttccta
P. Abe	atggttaa	gcaacaaccaa...132...cactcttttacttacagcaa	ATCCATAACAATGAA	acaggtgactttcatgctgc...128...cacttccccaga	tttccca
C. Jac	atggttaa	gcaacaaccaa...132...cactcttttacttacagcaa	ATCCATAACAATGAA	acaggtgactttcatgctgc...128...cgcttccccaga	tttccca
M. Mus	atgactaa	ccaacaaccaa...130...cactcttttacttacagcaa	ATCCATAACAATGAA	acaggtgactttcatgctgc...128...ggcttccccaga	tttccca
R. Nor	atgactaa	ccaacaaccaa...132...cactcttttacttacagcaa	ATCCATAACAATGAA	acaggtgactttcatgctgc...128...ggcttccccaga	tttccca
O. Cun	atggttaa	gcaacaaccaa...132...cactcttttacttacagcaa	ATCCATAACAATGAA	acaggtgactttcatgctgc...128...cgcttccccaga	tttccca
C. Fam	atggttaa	gcaacaaccaa...132...cactcttttacttacagcaa	ATCCATAACAATGAA	acaggtgactttcatgctgc...128...cgcttccccaga	tttccca
F. Cat	atggttaa	gcaacaaccaa...132...cactcttttacttacagcaa	ATCCATAACAATGAA	acaggtgactttcatgctgc...128...cgcttccccaga	tttccca
B. Tau	atggttaa	gcaacaaccaa...132...cactcttttacttacagcaa	ATCCATAACAATGAA	acaggtgactttcatgctgc...128...cgcttccccaga	tttccca
E. Cab	atggttaa	gcaacaaccaa...132...cactcttttacttacagcaa	ATCCATAACAATGAA	acaggtgactttcatgctgc...128...cgcttccccaga	tttccca
S. Sus	atggttaa	acaacaaccaa...132...cactcttttacttacagcaa	ATCCATAACAATGAA	acaggtgactttcatgctgc...128...cgcttccccaga	tttccca
L. Afr	atggttaa	gcaacaaccaa...132...cagtcttttacttacagcaa	ATCCATAACAATGAA	acaggtgactttcatgctgc...128...cacttccccaga	tttccccg
	*** **	***** **		***** **	*****

id=638111 gene=ENSG00000166960 name=C18orf34 segment=chr18_30517636_30517974_-1 type=E3

H. Sap	tTCAttTT	GTccATGGATca
R. Mac	tTCAttTT	GTccATGGATca
P. Tro	tTCAttTT	GTccATGGATca
P. Abe	tTCAttTT	GTccATGGATca
C. Jac	tTCAttTT	GTccATGGATca
M. Mus	tTCAttTT	GTccATGGATca
R. Nor	tTCAttTT	GTccATGGATca
O. Cun	tTCAttTT	GTccATGGATca
C. Fam	tTCAttTT	GTccATGGATca
F. Cat	tTCAttTT	GTccATGGATca
B. Tau	tTCAttTT	GTccATGGATca
E. Cab	tTCAttTT	GTccATGGATca
S. Sus	tTCAttTT	GTccATGGATca
L. Afr	tTCAttTT	GTccATGGATca
	*****	*****

id=638114 gene=ENSG00000166960 name=C18orf34 segment=chr18_30517367_30517370_-1 type=E3 VIEW

Figure 428:



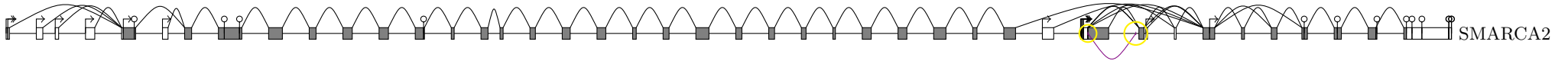
H.Sap	atattcat	gtgagtaacctt...4571...agggcacgagtc	tcaggttc	cctta	ggatga	cgcagctagccaagt	cacc-...336...atagctccttt	gttctgtt
P.Tro	atattcat	gtgagtaacctt...4571...agggcacgagtc	tcaggttc	cctta	ggatga	cgcagctagccaagt	cacc-...336...atagctccttt	gttctgtt
P.Abe	atattcat	gtgagtaacctt...4571...agggcacgagtc	tcaggttc	cctta	ggatga	cgcagctagccaagt	cacc-...336...atagctccttt	gttctgtt
C.Jac	atattcat	gtgagtaacctt...4571...agggcacgagtc	tcaggttc	cctta	ggatga	cgcagctagccaagt	cacc-...336...atagctccttt	gttctgtt
M.Mus	ttattcat	gtgagtagcctt...4495...aaggctogagtc	tcaggttc	cctta	ggatga	cgcagctagccaagt	cacc-...337...atagctcctct	gttcaatt
C.Por	atattcat	gtgagtaacctt...4324...agggcacgagtc	tcaggttc	cctta	ggatga	cgcagctagccaagt	cacct...334...atagctcctct	gttctgtt
O.Cun	atattcat	gtgagtaacctt...4408...agggcacgagtc	tcaggttc	cctta	ggatga	cgcagctagccaagt	cacc-...336...atagctccttt	gttctgtt
C.Fam	atattcat	gtgagtaacctt...4567...agggcacgagtc	tcaggttc	cctta	ggatga	cgcagctagccaagt	cacc-...340...atagctcctct	gttctgtt
B.Tau	atattcat	gtgagtaacctt...4547...agggcacgagtc	tcaggttc	cctta	ggatga	cgcagctagccaagt	cacct...359...atagctcctct	gttctgtt
E.Cab	atattcat	gtgagtaacctt...4572...agggcacgagtc	tcaggttc	cctta	ggatga	cgcagctagccaagt	cacct...334...atagctcctct	gttctgtt
S.Sus	atattcat	gtgagtaacctt...4574...agggcacgagtc	tcaggttc	cctta	ggatga	cgcagctagccaagt	cacc-...333...atagctcctct	gttctgtt
O.Avi	atattcat	gtgagtaacctt...4549...agggcacgagtc	tcaggttc	cctta	ggatga	cgcagctagccaagt	cacc-...358...atagctcctct	gttctgtt
L.Afr	ctattcat	gtgagtaacctt...4575...agggcacgagtc	tcaggttc	cctta	ggatga	cgcagctagccaagt	cacc-...333...atagctccttt	gttctgtt

id=456585 gene=ENSG00000182712 name=MTCP1NB segment=chrX_154293644_154298968_-1 type=I5

H.Sap	gctccttt	gttctgttcagt...285...ctacagaacagatg	ccctga	tcaccaaggact	tgg	tactgatttagagagaagag-...68...ttctccatcct	gtaaatat
P.Tro	gctccttt	gttctgttcagt...285...ctacagaacagatg	ccctga	tcaccaaggact	tgg	tactgatttagagagaagag-...68...ttctccatcct	gtaaatat
P.Abe	gctccttt	gttctgttcagt...285...ctacagaacagatg	ccctga	tcaccaaggact	tgg	tactgatttagagagaagag-...68...ttctccatcct	gtaaatat
C.Jac	gctccttt	gttctgttcagt...287...ctacagaacagatg	ccctga	tcaccaaggact	tgg	tactgatttagagagaagag-...68...ttctccatcct	gtaaatat
M.Mus	gctcctct	gttcaattcatt...296...ctacagaacagatg	ccctga	tcaccaaggact	tgg	tactgatttagagagaagag-...68...ttattccatcct	gtaaatat
C.Por	gctcctct	gttctgttcagt...280...gctacagaacagatg	ccctga	tcaccaaggact	tgg	tactgatttagagagaagag-...68...ttctcccacct	gtaaatat
O.Cun	gctccttt	gttctgttcagt...282...ctacagaacagatg	ccctga	tcaccaaggact	tgg	ctgatttagagagaagaga...67...ttctcccacct	gtaaatat
C.Fam	gctcctct	gttctgttcagt...287...ctacagaacagatg	ccctga	tcaccaaggact	tgg	tactgatttagagagaagag-...68...ttctcccacct	gtaaatat
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L.Afr	gctccttt	gttctgttcagt...276...ctacagaacagatg	ccctga	tcaccaaggact	tgg	tactgatttagagagaagag-...66...ttctcccacct	gtaaatat

id=456586 gene=ENSG00000182712 name=MTCP1NB segment=chrX_154293212_154293643_-1 type=A5 VIEW

Figure 429:



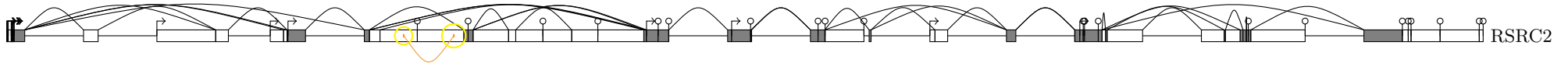
H. Sap	aatt	aggg	ctcgactccttg...	32...	tgcttctgtgattatttca	TTATTgTGCTG	gtAAAAgg
R. Mac	aatt	aggg	ctcgactccttg...	32...	tgcttctgtgattatttca	TTATTgTGCTG	gtAAAAgg
P. Tro	aatt	aggg	ctcgactccttg...	32...	tgcttctgtgattatttca	TTATTgTGCTG	gtAAAAgg
P. Abe	aatt	aggg	ctcgactccttg...	32...	tgcttctgtgattatttca	TTATTgTGCTG	gtAAAAgg
C. Jac	aatt	aggg	ctcgactccttg...	32...	tgcttctgtgattatttca	TTATTgTGCTG	gtAAAAgg
M. Mus	aatt	aggg	ctcgactccttg...	32...	tgcttctgtgattatttca	TTATTgTGCTG	gtAAAAgg
R. Nor	aatt	aggg	ctcgactccttg...	32...	tgcttctgtgattatttca	TTATTgTGCTG	gtAAAAgg
C. Por	aatt	aggg	ctcgactccttg...	32...	tgcttctgtgattatttca	TTATTgTGCTG	gtAAAAgg
C. Fam	aatt	aggg	ctcgactccttg...	32...	tgcttctgtgattatttca	TTATTgTGCTG	gtAAAAgg
B. Tau	aatt	aggg	ctcgactccttg...	33...	-gcttctgtgattatttcaa	TATTgTGCTG	gtAAAAgg
E. Cab	aatt	aggg	ctcgactccttg...	32...	tgcttctgtgattatttca	TTATTgTGCTG	gtAAAAgg
S. Sus	aatt	aggg	ctcgactccttg...	33...	-gcttctgtgattatttcaa	TATTgTGCTG	gtAAAAgg
O. Avi	aatt	aggg	ctcgactccttg...	33...	-gcttctgtgattatttcaa	TATTgTGCTG	gtAAAAgg
L. Afr	aatt	aggg	ct-gcgcttacac...	33...	tgcttctgtgattatttca	TTATTgTGCTG	gcAAAAgg
****	****	** *	** *	**	*****	*****	* *****

id=335501 gene=ENSG00000080503 name=SMARCA2 segment=chr9_2158513_2158587.1 type=AN

H. Sap	gaataatg	gtcag	tactttg...	731...	acaatcctttcagtattaaa	TTTTCAGTAaAATAA	aattactt	gtatatg	aaaacacagcctttcccagctctcttttttttcctgatcag	ctgatgaa
R. Mac	gaataatg	gtcag	tactttg...	728...	acaatcctttcagtattaaa	TTTTCAGTAaAATAA	aattactt	gtatatg	aaaacacagcctttcccagctctcttttttttcctgatcag	ctgatgaa
P. Tro	gaataatg	gtcag	tactttg...	1304...	acaatcctttcagtattaaa	TTTTCAGTAaAATAA	aattactt	gtatatg	aaaacacagcctttcccagctctcttttttttcctgatcag	ctgatgaa
P. Abe	gaataatg	gtcag	tactttg...	732...	acaatcctttcagtattaaa	TTTTCAGTAaAATAA	aattactt	gtatatg	aaaacacagcctttcccagctctcttttttttcctgatcag	ctgatgaa
C. Jac	gaataatg	gtcag	tactttg...	727...	acaatcctttcagtattaaa	TTTTCAGTAaAATAA	aattactt	gtatatg	aaaacacagcctttcccagctctcttttttttcctgatcag	ctgatgaa
M. Mus	gaataatg	gtcag	tactttg...	796...	acaaccccttcagtattaaa	TTTTCAGTAaAATAA	aattactt	gtatatg	aaaacacagccttt-cccagctctcttttttttcctgatcag	ctgatgaa
R. Nor	ggataacg	gtcag	tactctg...	822...	acaatccttcagtattaaa	TTTTCAGTAaAATAA	aattactt	gtatatg	aaaacacagccttt-cccagctctcttttttttcctgatcag	ctgatgaa
C. Por	gaataatg	gtcag	tactttt...	723...	acaatcctttcagtattaaa	TTTTCAGTAaAATAA	aattactt	gtatatg	aaaacacagccttt-cccagctctcttttttttcctgatcag	ctgatgaa
C. Fam	gaataatg	gtcag	tactttg...	758...	acaatcctttcagtattaaa	TTTTCAGTAaAATAA	aattactt	gtatatg	aaaacacagcctttcccagctctcttttttttcctgatcag	ctgatgaa
B. Tau	gaataatg	gtcag	tactttg...	733...	acaatcctttcagtattaaa	TTTTCAGTAaAATAA	aattactt	gtatatg	aaaacacagcctttcccagctctcttttttttcctgatcag	ctgatgaa
E. Cab	gaataatg	atcag	tactttg...	752...	acaatcgtttcagtattaaa	TTTTCAGTAaAATAA	aattactt	gtatatg	aaaacacagcctttcccagctctcttttttttcctgatcag	ctgatgaa
S. Sus	gaataatg	gtcag	tactttg...	738...	acaatcctttcagtattaaa	TTTTCAGTAaAATAA	aattactt	gtatatg	aaaacacagcctttcccagctctcttttttttcctgatcag	ctgatgaa
O. Avi	gaataatg	gtcag	tactttg...	740...	acaatcctttcagtattaaa	TTTTCAGTAaAATAA	aattactt	gtatatg	aaaacacagcctttcccagctc-cttttttttcctgatcag	ctgatgaa
L. Afr	gaagaatg	ggctg	gactttg...	783...	acaatcctttcagtattaaa	TTTTCAGTAaAATAA	aattactt	gtatatg	aaaacacagcctttcccggctctcttttttttcctgatcag	ctgatgaa
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id=335504 gene=ENSG00000080503 name=SMARCA2 segment=chr9_2158979_2159813.1 type=IN VIEW

Figure 430:



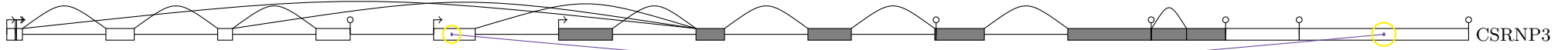
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R. Mac	ttgtcaag	gtaagtacaaaa...156...gttttttttaggcctgtcac	ACAG	AGCTTCCATTA	--atctgaggtcccaggtctcc...84...tta-tgaatgata	agaggagt
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C. Jac	ttgtcaag	gtaagtacaaaa...155...ggttttttaggtctgtctc	ACAG	AGCTTCCATTA	--atctgaggtcccaggtctct...84...tta-tgaaagatg	acaagagt
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R. Nor	ttgtcaag	gtaagtacaaaa...159...tggatttttaggcctgtgat	ACAG	AGCTTCCATTA	--atctgaggtcccaggtctcc...76...tatttgaaagta	ctgagtt-
C. Por	ttgtcacg	gtaagtacaaaa...154...ggttttttaggcctgtcac	ACAG	AGCTTCCATTA	atctgaggtcccaggtct--...84...tcg-tgaaagata	agagttct
O. Cun	ttgtcaag	gtaagtacaaaa...159...ggttttttaggcctgtcgc	ACAG	AGCTTCCATTA	--atctgaggtcccaggtctcc...84...tta-tgaaagata	acaagagt
C. Fam	ttatcaag	gtaagtacgaaa...162...ggttttttaggcctgtcac	ACAG	AGCTTCCATTA	--atctgaggtcccaggtctcc...81...tta-tggaagaga	atgcgaat
F. Cat	tcatcaag	gtaagtacaaaa...163...ggttttttaggcctgtcac	ACAG	AGCTTCCATTA	--atctgaggtcccaggtctcc...84...tta-tggaaggtta	acgagagt
B. Tau	ttgtcaag	gtaagtacaaaa...163...tggtttttaggcctgtgtgc	ACAG	AGCTTCCATTA	--atctgaggtcccaggtctcc...84...ttg-tggaaggtta	acaagagt
E. Cab	ttgtcaag	gtaagtacaaaa...162...cgtttttttaggcctgtcac	ACAG	AGCTTCCATTA	--atctgaggtcccaggtgtcc...84...tca-tggaaggtta	acaagagt
S. Sus	ttttcaag	gtaagtacaaaa...161...tggtttttaggtctgtctc	ACAG	AGCTTCCATTA	--atctgaggtcccaggtctcc...84...tta-tggaagata	acaagagt
O. Avi	ttgtcaag	gtaagtacaaaa...168...tggtttttaggcctgtgtgc	ACAG	AGCTTCCATTA	--atctgaagtcccaggtctcc...84...ttg-tggaaggtta	acaagagt
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id=212018 gene=ENSG00000111011 name=RSRC2 segment=chr12_123005525.123005842_-1 type=AN

H. Sap	-gaacgata	acaggagtctc---...263...agggacttcacctcttccc	TAATGGAAGCTCTGT	taaatttttaatttaggaga...54...aatcatactcag	cgtgctta
R. Mac	-gaatgata	agaggagtttt---...254...agggacttcacctcttccc	TAATGGAAGCTCTGT	taaatttttaatttaggaga...54...aatcatactcag	cgtgctaa
P. Tro	-gaacgata	acaggagtctc---...263...agggacttcacctcttccc	TAATGGAAGCTCTGT	taaatttttaatttaggaga...54...aatcatactcag	cgtgctta
P. Abe	-gaacgata	acaggagtctc---...265...agggacttcacctcttccc	TAATGGAAGCTCTGT	taaatttttaatttaggaga...54...aatcatactcag	cgtgctaa
C. Jac	-gaaagatg	acaagagtttct---...262...agggacttcacctcttccc	TAATGGAAGCTCTGT	taaatttttaatttaggaga...54...aatcatactcag	cgtgctaa
M. Mus	-tgaaaata	ctgagtttctt---...247...cgggacttcacctcttccc	TAATGGAAGCTCTGT	taagtttttaatttaggaga...54...aatcatactcag	cgtgctaa
R. Nor	ttgaaagta	ctgagtttctt---...249...agggacttcacctcttccc	TAATGGAAGCTCTGT	taagtttttaatttaggaga...54...aatcatactcag	cgtgctaa
C. Por	-gaaagat-	--aagagttctt---...262...agggacttcacctcttccc	TAATGGAAGCTCTGT	taaatttttaatttaggaga...55...aatcatactcag	cgtgctaa
O. Cun	-gaaagata	acaagagttctc---...243...agggacttcacctcttccc	TAATGGAAGCTCTGT	taaatttttaatttaggaga...54...aatcatactcag	cgtgctaa
C. Fam	-ggaagaga	atgcgaatcctc---...266...agggacttcacctcttccc	TAATGGAAGCTCTGT	taaatttttaatttaggaga...54...aatcatactcag	cgtgctaa
F. Cat	-ggaaggtta	acaagagtcctc---...286...agggacttcacctcttccc	TAATGGAAGCTCTGT	taaatttttaatttaggaga...54...aatcatactcag	cgtgctaa
B. Tau	-ggaaggtta	acaagagtcctt---...248...agggacttcacctcttccc	TAATGGAAGCTCTGT	tacatttttaatttaggaga...54...aatcatactcag	cgtgctaa
E. Cab	-ggaaggtta	acaagagtcctc---...263...agggacttcacctcttccc	TAATGGAAGCTCTGT	taaatttttaatttaggaga...55...aatcatactcag	cgtgctaa
S. Sus	-ggaagata	acaagagtcatt---...240...agggacttcacctcttccc	TAATGGAAGCTCTGT	taaatttttaatttaggaga...54...aatcatactcag	cgtgctaa
O. Avi	-ggaaggtta	acaagagtcctt---...247...agggacttcacctcttccc	TAATGGAAGCTCTGT	tacatttttaatttaggaga...54...aatcatactcag	cgtgctaa
	*	* * *	***** **	***** **	***** **

id=212019 gene=ENSG00000111011 name=RSRC2 segment=chr12_123005129.123005524_-1 type=AN VIEW

Figure 431: CS=9



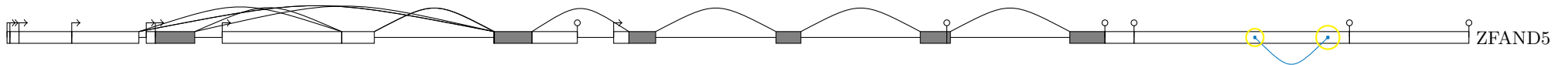
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R. Mac	taggcagc	ctcagtgaggct...51...--ttgttgctgaacaataaagc	ATATGGTACA	GCAATAAAACACAG	ggctgggaaatttaagaaga...109...ctatttgaacag	gttggtga
P. Tro	taggcagc	ctcagtgaggct...51...--ttgttgctgaacaataaagc	ATATGGTACA	GCAATAAAACACAG	ggctgggaaatttaagaaga...109...ctatttgaacag	gttggtga
P. Abe	taggcagc	ctcagtgaggct...51...--ttgttgctgaacaataaagc	ATATGGTACA	GCAATAAAACACAG	ggctgggaaatttaagaaga...109...ctatttgaacag	gttggtga
C. Jac	tagccagc	ctcagtgaggct...51...--ttgtcgctgaacaataaagc	ATATGGTACA	GCAATAAAACACAG	ggctgggaaatttaagaaga...109...ctatttgaacag	gtcgggtga
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O. Cun	taggcagc	ctcagagaggct...56...-----gctgaacaataaagcatatg	GTAC	caGCAATAAAACACAG	ggctgggaaatttcagaaga...113...ctatttgaacag	gtcgggtga
C. Fam	taggcagc	ctcagtgaggct...51...--ttgtcgctgaacaataaagc	ATACgGTAC	caGCAATAAAACACAG	ggctgggaaatttaagaaga...113...ctatttgaacag	gtcagggtga
B. Tau	taggcagc	ctcagtgaggct...51...--ttgtcgatgaacaataaagc	ATACgGTAC	caGCAATAAAACACAG	ggctgggaaatttcagaaga...113...ctatttgaacag	gtcagggtga
E. Cab	taggcagc	ctcagtgaggct...51...--ttgtcgctgaacaataaagc	ATACgGTAC	caGCAATAAAACACAG	ggctgggaaatttaagaaga...113...ctatttgaacag	gtcagggtga
S. Sus	taggcagc	ctcagtgaggct...51...--ttgtcgctgaacaataaagc	ATACgGTAC	caGCAATAAAACACAG	ggctgggaaatttcagaaga...113...ctatttgaacag	gtcagggtga
O. Avi	taggcagc	ctcagtgaggct...51...--ttgtcgctgaacaataaagc	ATACgGTAC	caGCAATAAAACACAG	ggctgggaaatttcagaaga...112...ctatttgaacag	gtcagggtga
L. Afr	taggcagt	ctcagtaaggct...51...--ttgtcgctgaacaataaagc	ATATGGTAC	caGCAATAAAACACAG	ggctgggaaatttaagaaga...117...ttgacaacacag	gtcgggtga
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id=165423 gene=ENSG00000178662 name=CSRN3 segment=chr2_166428849_166429097_1 type=A5

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R. Mac	aagaaaaa	gatttaattggt...4785...catggaaattcgtgtat	TTGTGgc	TTTTtATTGcag	TGTGTaTATAT	-----atatacaataaagcatttt...110...ttctaagttgta	tctactgt
P. Tro	aagaaaaa	gatttaattggt...4785...catggaaattcgtgtat	TTGTGgc	TTTTtATTGcag	TGTGTaTATAT	-----atatacaataaagcatttt...110...ttctaagttgta	tctactgt
P. Abe	aagaaaaa	gatttaattggt...4785...catggaaattcgtgtat	TTGTGgc	TTTTtATTGcag	TGTGTaTATAT	-----atatacaataaagcatttt...110...ttctaagttgta	tctactgt
C. Jac	aagaaaaa	gataataactggt...4783...catgaaatttgtgtat	TTGTGgc	TTTTtATTGcag	TGTGTaTATAT	-----atatacaataaagcatt--...112...ttctaagttgta	tctactgt
C. Por	aagaaaaa	gatttaattggt...4782...catggaaatttgtgtat	TTGTGgc	TTTTtATTGcag	GTGTGTGTGT	----atataatattacaataag-----...115...ttctaagttata	tttactgt
O. Cun	aagacaaa	gatttaattggt...4782...catggaaatttgtgtat	TTGTGgc	TTTTtATTGcag	GTGT	----gtaaatatataattacaaa-----...121...ttctaagttgta	gctactgt
C. Fam	aagaaaaa	gatttaattggt...4783...catggaaattcgtgtat	TTGTGgc	TTTTtATTGcag	GTGTGTAT	----atataatattacaataaag-----...116...ttctaagttgta	tttactgt
B. Tau	aagaaaaa	gatttaattggt...4776...catggaaattcgtgtat	TTGTGgc	TTTTtATTGcag	GTGTGTAT	----atataatattacaataaag-----...123...ttctaagttgta	tctactgt
E. Cab	aagaaaaa	gatttaattggt...4783...catggaaattcgtgtat	TTGTGgc	TTTTtATTGcag	GTGTGTAT	----atataatattacaataaag-----...116...ttctaagttgta	tctactgt
S. Sus	aagaaaaa	gatttaattggt...4785...catggaaatttgtgtat	TTGTGgc	TTTTtATTGcag	GTGTGTAT	----atataatattacaataaag-----...114...ttctaagttgta	tctactgt
O. Avi	aagaaaaa	gatttaattggt...4777...catggaaattcgtgtat	TTGTGgc	TTTTtATTGcag	GTGTGTAT	----atataatattacaataaag-----...122...ttctaagttgta	tctactgt
L. Afr	aagaaaaa	gatttaattggt...4781...catggaaatttgtgtat	TTGTGgc	TTTTtATTGcag	GTGTGTAT	----atataatattacaataaag-----...116...ttctaagttgta	tctactgt
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Figure 432:



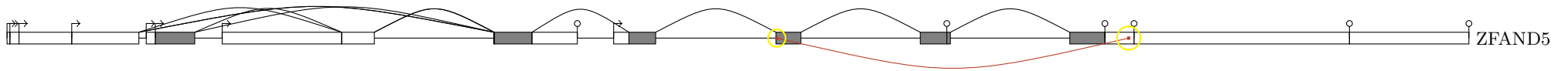
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R. Mac	tacacttg	tctgtcttataa...931...gggtgtattgcatgggctgcATTATCTACA	gCATTgtacaataacaactagaaaa...365...tacagagggaaa	cttcactt-
P. Tro	tacacttg	tctgtcttataa...931...gggtgtattgcatgggctgcATTATCTACA	gCATTgtacaataacaactagaaaa...365...tacagagggaaa	cttcactt-
P. Abe	tacacttg	tctgtcttataa...960...gggtgtattgcatgggctgcATTATCTACA	gCATTgtacaataacaactagaaaa...385...tacagagggaaa	cttcactt-
C. Jac	tccacttg	tctgtcttataa...927...gggtgtattgcatgggctgcATTATCTACA	gCATTgtacaataacaactagaaaa...361...tacagagggaaa	cttcactt-
M. Mus	tatacttg	tctgtcatataa...893...gggtgtattgcatgggctgcATTATCTACA	gCATTgtacaataacaactagaaaa...365...tacagagggaaa	cttcctgt-
R. Nor	tatacttg	tctgtcatataa...886...gggtgtattgcatgggctgcATTATCTACA	gCATTgtacaataacaactagaaaa...363...tacagagggaaa	cttcctgt-
C. Por	tacacttg	tctgtcttataa...927...gggtgtattgcatgggctgcATTATCTACA	gCATTgtacaataacaactagaaaa...365...tacagagggaaa	cttcactt-
D. Cun	tacacttg	tctgtcttataa...931...gggtgtattgcatgggctgcATTATCTACA	gCATTgtacaataacaactagaaaa...360...tacagagggaaa	cttcactt-
C. Fam	tacacttg	tctgtcttataa...939...gggtgtattgcatgggctgcATTATCTACA	gCATTgtacaataacaactagaaa...367...tacagagggaaa	cttcactt-
F. Cat	tacacttg	tctgtcttataa...938...gggtgtattgcatgggctgcATTATCTACA	gCATTgtacaataacaactagaaa...366...tacagagggaaa	cttcactt-
B. Tau	tacacttg	tctgtcttataa...937...gggtgtattgcatgggctgcATTATCTACA	gCATTgtacaataacaactagaaa...372...tacagagggaaa	cttcactt-
E. Cab	tacacttg	tctgtcttataa...934...gggtgtattgcatgggctgcATTATCTACA	gCATTgtacaataacaactagaaa...369...tacagagggaaa	cttcactt-
S. Sus	tacacttg	tctgtcttataa...928...gggtgtattgcatgggctgcATTATCTACA	gCATTgtacaataacaactagaaa...370...-acagagggaaa	cttcactt-
L. Afr	tacacttg	tctgtcttataa...926...gggtgtattgcatgggctgcATTATCTACA	gCATTgtacaataacaactagaaa...370...tacagagggaaa	cttcactt-
	*	*****	*****	*

id=120360 gene=ENSG00000107372 name=ZFAND5 segment=chr9_74969374_74970748_-1 type=EN

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R. Mac	tacacttg	tctgtcttataa...1237...agttctgagtttagacctgcaGATGTGTA	caGATAGTtcatatattatgtattgcaca...58...tacagagggaaa	cttcactt-
P. Tro	tacacttg	tctgtcttataa...1238...agttctgagtttagacctgcaGATGTGTA	caGATAGTtcatatattatgtattgcaca...57...tacagagggaaa	cttcactt-
P. Abe	tacacttg	tctgtcttataa...1286...agttctgagtttagacctgcaGATGTGTA	caGATAGTtcatatattatgtattgcaca...58...tacagagggaaa	cttcactt-
C. Jac	tccacttg	tctgtcttataa...1230...agttctgagtttagacctgcaGATGTGTA	caGATAGTtcatatattatgtattgcaca...57...tacagagggaaa	cttcactt-
M. Mus	tatacttg	tctgtcatataa...1200...agttctgagtttagacctgcaGATGTGTA	caGATAGTtcatatattatgtattgcaca...57...tacagagggaaa	cttcactt-
R. Nor	tatacttg	tctgtcatataa...1191...agttctgagtttagacctgcaGATGTGTA	caGATAGTtcatatattatgtattgcaca...57...tacagagggaaa	cttcactt-
C. Por	tacacttg	tctgtcttataa...1234...tagtttgagtttagacctgcaGATGTGTA	caGATAGTtcatatattatgtattgcaca...57...tacagagggaaa	cttcactt-
D. Cun	tacacttg	tctgtcttataa...1233...agttctgagtttagacctgcaGATGTGTA	caGATAGTtcatatattatgtattgcaca...57...tacagagggaaa	cttcactt-
C. Fam	tacacttg	tctgtcttataa...1248...agttctgagtttagacctgcaGATGTGTA	caGATAGTtcatatattatgtattgcaca...57...tacagagggaaa	cttcactt-
F. Cat	tacacttg	tctgtcttataa...1246...agttctgagtttagacctgcaGATGTGTA	caGATAGTtcatatattatgtattgcaca...57...tacagagggaaa	cttcactt-
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S. Sus	tacacttg	tctgtcttataa...1239...agttctgagtttagacctgcaGATGTGTA	caGATAGTtcatatattatgtattgcaca...58...-acagagggaaa	cttcactt-
L. Afr	tacacttg	tctgtcttataa...1237...agttctgagtttagacctgcaGATGTGTA	caGATAGTtcatatattatgtattgcaca...58...tacagagggaaa	cttcactt-
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Figure 433:



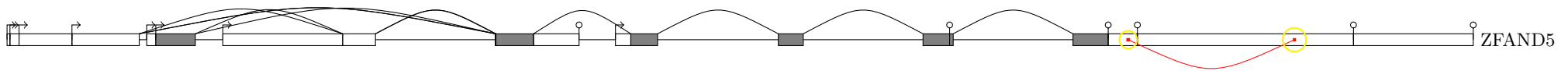
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R.Mac	aaatcaag	gtaagattgaac...570...gctttaa	---aattgtttgctt	GAACTCAAA	TAG	AAATG	tgc
P.Tro	aaatcaag	gtaagattgaac...542...cctttaa	---aattgtttgctt	GAACTCAAA	TAG	AAATG	tgc
P.Abe	aaatcaag	gtaagattgaac...547...cctttaa	---aactgtttgctt	GAACTCAAA	TAG	AAATG	tgc
C.Jac	aaatcaag	gtaagattgaac...549...cctttaa	---aattgtttgctt	GAACTCAAA	TAG	AAATG	tgc
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R.Nor	aaatcaag	gtaagagtgaac...535...---	ttaaaataaattgtttgctt	GAACTCAAA	taG	AAATG	tgc
C.Por	aaatcaag	gtaagaccaagg...508...tctttata	---aattgtttgctt	GAACTCAAA	taG	AAATG	tgc
O.Cun	aaatcaag	gtaagaatgagc...529...---	ttaaaataaattgtttgctt	GAACTCAAA	TAG	AAATG	tgc
C.Fam	aagtcaag	gtaagattgatc...592...atctttaa	---aaatgtttgctt	GAACTCAAA	taG	AAATG	tgc
B.Tau	aaatcaag	gtaagattaaac...583...atctttaa	---aaatgtttgctt	GAACTCAAA	taG	AAA	atg
E.Cab	aaatcaag	gtaagattgaac...590...atcttgaa	---aaatgtttgctt	GAACTCAAA	taG	AAATG	tgc
S.Sus	aaatcaag	gtaagattgaat...579...atcttgaa	---aaatgtttgctt	GAACTCAAA	taG	AAATG	tgc
L.Afr	aaatcaag	gtaagattgaat...485...---	ttagaataaattgtttgctt	GAACTCAAA	taG	AAATG	tgc
	** *****	***** *	** * ** *****			**** **	

id=120352 gene=ENSG00000107372 name=ZFAND5 segment=chr9.74974438.74975025_-1 type=IN

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R.Mac	gagaatat-	aaattacttctt...49...ttaaagagcagatgcatggc	CATTTTCTTTGATGTTc	ccagagttttactttacacttg	tctgtcct
P.Tro	gagaatat-	aaattacttctt...49...ttaaagagcagatgcatggc	CATTTTCTTTGATGTTc	ccagagttttactttacacttg	tctgtcct
P.Abe	gagaatata	agattacttctt...50...ttaaagagcagatgcatggc	CATTTTCTTTGATGTTc	ccagagttttactttacacttg	tctgtcct
C.Jac	gagaatat-	aaattactactt...49...ttaaagagcagatgcatggc	CATTTTCTTTGATGTTc	ccagagttttactttccacttg	tctgtcct
M.Mus	-agaatata	aaattactacat...49...ttaaagagcagatgcatggc	CATTTTCTTTGATGTTc	ccagagttttgctttacacttg	tctgtcat
R.Nor	gagaatata	aaattactaca...50...ttaaagagcagatgcatggc	CATTTTCTTTGATGTTc	ccagagttttgctttacacttg	tctgtcat
C.Por	gagaatat-	aaattagtgtctt...49...ttaaagagcagatgcatggc	CATTTTCTTTGATGTTc	ccagagttttgctttacacttg	tctgtcct
O.Cun	gagaatat-	aaattactactt...49...ttaaagagcagatgcatggc	CATTTTCTTTGATGTTc	ccagagttttactttacacttg	tctgtcct
C.Fam	gagaatat-	aaattactactt...49...ttaaagagcagatgcatggc	CATTTTCTTTGATGTTc	ccagagttttactttacacttg	tctgtcct
B.Tau	gagaatat-	aaattactactt...52...--aagagcagatgcatggccatTTTc	TTTgATGTTc	ccagagttttactttacacttg	tctgtcct
E.Cab	gagaatat-	aaattactactt...49...ttaaagagcagatgcatggc	CATTTTCTTTGATGTTc	ccagagttttactttacacttg	tctgtcct
S.Sus	gagaatat-	aaattactactt...50...ttaaagagcagatgcatggc	CATTTTCTTTGATGTTc	ccagagttttactttacacttg	tctgtcct
L.Afr	gagaatata	aaattactactt...50...ttaaagagcagatgcatggc	CATTTTCTTTGATGTTc	ccagagttttactttacacttg	tctgtcct
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id=120359 gene=ENSG00000107372 name=ZFAND5 segment=chr9.74970749.74970870_-1 type=EN VIEW

Figure 434: CS=9.8



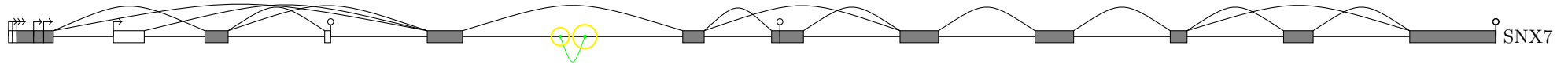
H. Sap	gagaatat-aaattacttctt...33...-atetcgtaggaaaacattaaAGAGCAGatGCATgGCCATtttctttgatgtttccagagttttacattacattg	tctgtcctt
R. Mac	gagaatat-aaattacttctt...33...-atetcgtaggaaaacattaaAGAGCAGatGCATgGCCATtttctttgatgtttccagagttttactttacattg	tctgtcctt
P. Tro	gagaatat-aaattacttctt...33...-atetcgtaggaaaacattaaAGAGCAGatGCATgGCCATtttctttgatgtttccagagttttactttacattg	tctgtcctt
P. Abe	gagaatata-agattacttctt...33...-atetcgtaggaaaacattaaAGAGCAGatGCATgGCCATtttctttgatgtttccagagttttactttacattg	tctgtcctt
C. Jac	gagaatat-aaattactactt...33...-atetcgtaggaaaacattaaAGAGCAGatGCATgGCCATtttctttgatgtttccagagttttactttaccattg	tctgtcctt
M. Mus	-agaatata-aaattactacat...33...-atetcgtaggaaaacattaaAGAGCAGatGCATgGCCATtttctttgatgtttccagagttttgctttactg	tctgtcat
R. Nor	gagaatata-aaattactaca...34...-atetcgtaggaaaacattaaAGAGCAGatGCATgGCCATtttctttgatgtttccagagttttgctttactg	tctgtcat
C. Por	gagaatat-aaattagtgcctt...33...-atetcgtaggaaaacattaaAGAGCAGatGCATgGCCATtttctttgatgtttccagagttttgctttactg	tctgtcctt
O. Cun	gagaatat-aaattactactt...33...-atetcgtaggaaaacattaaAGAGCAGatGCATgGCCATtttctttgatgtttccagagttttactttacattg	tctgtcctt
C. Fam	gagaatat-aaattactactt...33...-atetcgtaggaaaacattaaAGAGCAGatGCATgGCCATtttctttgatgtttccagagttttactttacattg	tctgtcctt
F. Cat	gagaatat-aaattactactt...33...-atetcgtaggaaaacattaaAGAGCAGatGCATgGCCATtttctttgatgtttccagagttttactttacattg	tctgtcctt
B. Tau	gagaatat-aaattactactt...33...-atetcgtaggaaaacattaaAGAGCAGatGCATgGCCATtttctttgatgtttccagagttttactttacattg	tctgtcctt
E. Cab	gagaatat-aaattactactt...33...-atetcgtaggaaaacattaaAGAGCAGatGCATgGCCATtttctttgatgtttccagagttttactttacattg	tctgtcctt
S. Sus	gagaatat-aaattactactt...34...-atetcgtaggaaaacattaaAGAGCAGatGCATgGCCATtttctttgatgtttccagagttttactttacattg	tctgtcctt
L. Afr	gagaatata-aaattactactt...34...-atetcgtaggaaaacattaaAGAGCAGatGCATgGCCATtttctttgatgtttccagagttttactttacattg	tctgtcctt
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R. Mac	tacacttg tctgtcttataa...1081...-----aaatgagtagatag-ttagtgttGTGGT-aATGCCTGTTTT-cactctgt-aaatagttaagta...213...tacagagggaaa	cttcactt-
P. Tro	tacacttg tctgtcttataa...1082...-----aaatgagtagatag-ttagtgttGTGGT-aATGCCTGTTTT-cactctgt-aaatagttaagta...212...tacagagggaaa	cttcactt-
P. Abe	tacacttg tctgtcttataa...1123...-----aatgagtagatag-ttagtgttGTGGT-aATGCCTGTTTT-cactctgt-aaatagttaagta...218...tacagagggaaa	cttcactt-
C. Jac	tccacttg tctgtcttataa...1077...-----aaatgactatag-ttagtgttGTGGT-aATGCCTGTTTT-cactctgt-aaatagttaagta...209...tacagagggaaa	cttcactt-
M. Mus	tatacttg tctgtcatataa...1048...-----agtatagtagattagtagttGTGGT-aATGCCTGTTTT-cactctgt-aaatagttaagta...208...tacagagggaaa	cttcactt-
R. Nor	tatacttg tctgtcatataa...1041...-----agtatagtagattagtagttGTGGT-aATGCCTGTTTT-cactctgt-aaatagttaagta...206...tacagagggaaa	cttcactt-
C. Por	tacacttg tctgtcttataa...1082...-----agcatagtagtagtagttGTGGT-aATGCCTGTTTT-cactctgt-aaatagttaagta...208...tacagagggaaa	cttcactt-
O. Cun	tacacttg tctgtcttataa...1086...-----agtatagtagattagtagttGTGGT-aATGCCTGTTTT-cactctgt-aaatagttaagta...203...tacagagggaaa	cttcactt-
C. Fam	tacacttg tctgtcttataa...1094...-----agtatagtagattagtagttGTGGT-aATGCCTGTTTT-cactctgt-aaatagttaagta...210...tacagagggaaa	cttcactt-
F. Cat	tacacttg tctgtcttataa...1092...-----agcatagtagtagtagttGTGGT-aATGCCTGTTTT-cactctgt-aaatagttaagta...210...tacagagggaaa	cttcactt-
B. Tau	tacacttg tctgtcttataa...1092...-----agtatagtagattagtagttGTGGT-aATGCCTGTTTT-cactctgt-aaatagttaagta...215...tacagagggaaa	cttcactt-
E. Cab	tacacttg tctgtcttataa...1090...-----agtatagtagattagtagttGTGGT-aATGCCTGTTTT-cactctgt-aaatagttaagta...211...tacagagggaaa	cttcactt-
S. Sus	tacacttg tctgtcttataa...1083...-----agtatagtagattagtagttGTGGT-aATGCCTGTTTT-catttgt-aaatagttaagta...213...-acagagggaaa	cttcactt-
L. Afr	tacacttg tctgtcttataa...1076...taaagtagtagtagtagttAGTGTGTGGT-aATGCCTGTTTT-cactctgt-aaatagttaagta...212...tacagagggaaa	cttcactt-
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Figure 435:



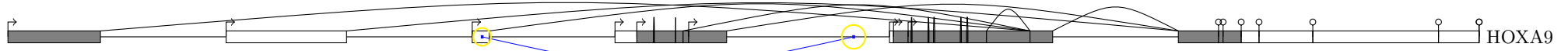
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R. Mac	ttactaag	gtaaatgttgg...4702...	cagatggttgttgaagaca	GATT	TTCAGTTT	gattttaaat	taagtatga...209...	tactttcttcag	acatctcg
P. Tro	ttactaag	gtaaacatttgg...4701...	cagatggttgttgaagaca	GATT	TTCAGTTT	gattttaaat	taagtatga...210...	tactttcttcag	acatctcg
P. Abe	ttactaag	gtaaacatttgg...4699...	cagatggttgttgaagaca	GATT	TTCAGTTT	gattttaaat	taagtatga...212...	tactttcttcag	acatctcg
C. Jac	ttactaag	gtaaatgttgg...4707...	cagatggttgttgaagaca	GATT	TTCAGTTT	gattttaaat	taagtatga...204...	tgctttattcag	acatctcg
M. Mus	taaccaag	gtaactcctgag...4680...	cagatggctgttgaagaca	GATT	TTCAGTTT	cgacttga	tttaagcatg-...232...	ttcttctctcag	acatctcg
R. Nor	taaccaag	gtaacttctgag...4704...	cagatggctgttgaagaca	GATT	TTCAGTTT	cgacttcag	atttaagcatg-...208...	tgcttctctcag	acatctcg
C. Por	ttacaag	gtaaacagtga...4708...	cagatggttgttgaagaca	GATT	TTCAGTTT	gactttaa	atttaagcataa...203...	tactttctgcag	acatctcg
O. Cun	ttactaag	gtaaacatcaa...4063...	cagatggttgttgaagaca	GATT	TTCAGTTT	gattttaa	atttaaatcatga...195...	gatgatcctaag	acgtctcg
C. Fam	ttactaag	gtaaatTTTTag...4705...	cagatggctgctctaagaca	GATT	TTCAGTTT	gattttaa	atttgagcatga...206...	tactttcttcag	acatctcg
F. Cat	ttactaag	gtaaatcttta...4705...	cagatggctgctctaagaca	GATT	TTCAGTTT	gattttaa	atttgagcatga...206...	tactttcttcag	acatctcg
B. Tau	ttactaag	gtaaatgttaa...4697...	cagatggttgctctgaagaca	GATT	TTCAGTTT	gattttaa	atttgagcatga...214...	tactttcttcag	acatctcg
S. Sus	tcactaag	gtaaatatcgaa...4702...	cagatggtttctctaagaca	GATT	TTCAGTTT	gattttaa	attcgagcatga...209...	gaccttctccag	acatctcg
O. Avi	ttactaag	gtaagtatttaa...4697...	cagatggttgctctgaagaca	GATT	TTCAGTTT	gattttaa	atttgagcatga...214...	tactttcttcag	acatctcg

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R. Mac	ttactaag	gtaaatgttgg...4826...	aaaaaaaaattacaggctga	CAAA	CACTGAA	TAAT	aggattgtg	ttaatTTTTctt---...83...	tactttcttcag	acatctcg
P. Tro	ttactaag	gtaaacatttgg...4826...	agaaaaaaaaattacaggctga	CAAA	CACTGAA	TAAT	aggatgtg	ttaatTTTTctt---...83...	tactttcttcag	acatctcg
P. Abe	ttactaag	gtaaacatttgg...4826...	aaaaaaaaattacaggctga	CAAA	CACTGAA	TAAT	aggattgtg	ttaatTTTTctt---...83...	tactttcttcag	acatctcg
C. Jac	ttactaag	gtaaatgttgg...4826...	caaaaaaaaaattacaggctga	CAAA	CACTGAA	TAAT	aggattgtg	ttaatTTTTctt---...83...	tgctttattcag	acatctcg
M. Mus	taaccaag	gtaactcctgag...4828...	aa-aagaaaaattacaggctgac	AAAC	CACTGAA	TAAT	aat---tca	agttttcttaga...82...	ttcttctctcag	acatctcg
R. Nor	taaccaag	gtaacttctgag...4829...	aa-aagaaaaattacaggctgac	AAAC	CACTGAA	TAAT	aat---tca	agttttcttaga...81...	tgcttctctcag	acatctcg
C. Por	ttacaag	gtaaacagtga...4826...	actaaaaaaaaattacaggctga	CAAA	CACTGAA	TAAT	acaattgt	ttaatTTTTctt---...83...	tactttctgcag	acatctcg
O. Cun	ttactaag	gtaaacatcaa...4185...	aaagaaaaaaaaattacaggctga	CAAA	CACTGAA	TAAT	aagattgtg	ttaatTTTTctt---...71...	gatgatcctaag	acgtctcg
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F. Cat	ttactaag	gtaaatcttta...4826...	gcaaaaaaagtacaggctga	CAAA	CACTGAA	TAAT	agaattgtg	ttaatTTTTctt---...83...	tactttcttcag	acatctcg
B. Tau	ttactaag	gtaaatgttaa...4826...	aaaaaaaaattacaggctga	CAAA	CACTGAA	TAAT	agaattgtg	tagTTTTctt---...83...	tactttcttcag	acatctcg
S. Sus	tcactaag	gtaaatatcgaa...4830...	aaaaaaaaaagtacaggctga	CAAA	CACTGAA	TAAT	agaattgtg	tagTTTTgag---...79...	gaccttctccag	acatctcg
O. Avi	ttactaag	gtaagtatttaa...4826...	aaaaaaaaattacaggctga	CAAA	CACTGAA	TAAT	agaattgtg	tagTTTTctt---...83...	tactttcttcag	acatctcg

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Figure 436:



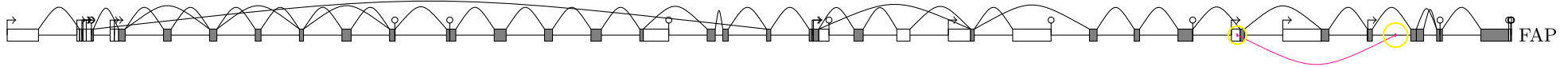
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P.Abe	attacttt	aggcatctattt	aaatattac	ctaga	CGGTCGTAATTTGT	TGGG	cc	CTATA	gccctggtg	cgcgtaag	gtttgtcg
C.Jac	attacttg	aggcatctattt	aaatattac	ctaga	CGGTCGTAATTTGT	TGGG	cc	CTATA	gccctggtg	cgcgtaag	gtttgtcg
M.Mus	attacttt	aggcatctattt	aaatattac	ctaga	CGGTCGTAATTTGT	TGGG	cc	CTATA	gccctggtg	cgcgtaag	gtttgtcg
R.Nor	attacttt	aggcatctattt	aaatattac	ctaga	CGGTCGTAATTTGT	TGGG	cc	CTATA	gccctggtg	cgcgtaag	gtttgtcg
C.Por	attacttt	aggcatctattt	aaatattac	ctaga	CGGTCGTAATTTGT	TGGG	cc	CTATA	gccctggtg	cgcgtaag	gtttgtcg
O.Cun	attacttt	aggcatccattt	aaatattac	ctaga	CGGTCGTAATTTGT	TGGA	cc	CTATA	gccctggtg	cgcgtaag	gtttgtcg
C.Fam	attacttt	aggcatctattt	aaatattac	ctaga	CGGTCGTAATTTGT	TGGG	cc	CTATA	gccctggtg	cgcgtaag	gtttgtcg
B.Tau	attacttt	aggcatctattt	aaatattac	ctaga	CGGTCGTAATTTGT	TGGG	cc	CTATA	gccctggtg	cgcgtaag	gtttgtcg
E.Cab	attacttt	aggcatctattt	aaatattac	ctaga	CGGTCGTAATTTGT	TGGG	cc	CTATA	gccctggtg	cgcgtaag	gtttgtcg
S.Sus	attacttt	aggcatctattt	aaatattac	ctaga	CGGTCGTAATTTGT	TGGG	cc	CTATA	gccctggtg	cgcgtaag	gtttgtcg
L.Afr	attacttt	aggcatctattt	aaatattac	ctaga	CGGTCGTAATTTGT	TGGG	cc	CTATA	gccctggtg	cgcgtaag	gtttgtcg
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id=338962 gene=ENSG0000078399 name=HOXA9 segment=chr7_27210050_27210117_-1 type=AN

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P.Tro	cacagcag	gtagggttaggt...	3566...	gatccctttacataaaaaca	TATGG	ctTTTG	ctATAAAAAATTATGACTG	caaaacac	cgggccattaat...	113...	tgccaccaagtt	gttacatg
P.Abe	cacagcag	gtagggttaggt...	3455...	gatccctttacataaaaaca	TATGG	ctTTTG	ctATAAAAAATTATGACTG	caaaacac	cgggccattaat...	113...	tgccaccaagtt	gttacatg
C.Jac	cactgcag	gtaaggtcaggt...	3549...	gatccctttgataaaaaca	TATGG	ctTTTG	ctATAAAAAATTATGACTG	caaaacac	cgggccattaat...	122...	tgccaccaagtt	gttacatg
M.Mus	cggagcag	gtacagtcaggt...	3514...	gatccctttgataaaaaca	TATGG	ctTTTG	ctATAAAAAATTATGACTG	caaaacac	cgggccattaat...	116...	tgccaccaagtt	gttacatg
R.Nor	cggagcag	gtacagtcaggt...	3667...	gatccctttgataaaaaca	TATGG	ctTTTG	ctATAAAAAATTATGACTG	caaaacac	cgggccattaat...	115...	tgccaccaagtt	gttacatg
C.Por	cggagcag	gtacagtcaggt...	3504...	gatccctttgataaaaaca	TATGG	ctTTTG	ctATAAAAAATTATGACTG	caaaacac	cgggccattaat...	115...	tgccaccaagtt	gttacatg
O.Cun	cggagcag	gtacagtcaggt...	3586...	gatccctttgataaaaaca	TATGG	ctTTTG	ctATAAAAAATTATGACTG	caaaacac	cgggccattaat...	112...	tgccaccaagtt	gttacatg
C.Fam	cagagcag	gtacagtcaggt...	3610...	gatccctttgataaaaaca	TATGG	ctTTTG	ctATAAAAAATTATGACTG	caaaacac	cgggccattaat...	116...	tgccaccaagtt	gttacatg
B.Tau	tggagcag	gtacagtcaggt...	3554...	gatccctttgataaaaaca	TATGG	ctTTTG	ctATAAAAAATTATGACTG	caaaacac	cgggccattaat...	114...	tgccaccaagtt	gttacatg
E.Cab	ctgagcag	gtatggtcaggt...	3569...	gatccctttgataaaaaca	TATGG	ctTTTG	ctATAAAAAATTATGACTG	caaaacac	cgggccattaat...	112...	tgcaccaagtt	gttacatg
S.Sus	aggagcag	gtacagtcaggt...	3595...	gatccctttgataaaaaca	TATGG	ctTTTG	ctATAAAAAATTATGACTG	caaaacac	cgggccattaat...	114...	tgccaccaagtt	gttacatg
L.Afr	gggagaag	gtatgatcaggt...	3620...	gatccctttgataaaaaca	TATGG	ctTTTG	ctATAAAAAATTATGACTG	caaaacac	cgggccattaat...	111...	tgccaccaagtt	gttacatg
	* **	***	* ****	*****	*****	*****	*****	* * *****	*****	*****	*****	

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Figure 437:



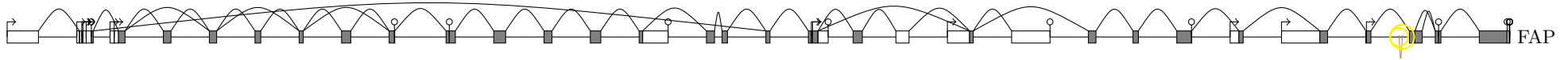
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R. Mac	atgtgttt	aaacaaagaaaatgtagcgtttctatta	aaatctttggatta	aaatggtt	gtgtaat	GAAGTaa	ATGTCATGTGT	A	TACA	cacttaacattct	aaaaattg	tgttcttt	actttag	aaaattca	
P. Tro	atgtgttt	aaacaaagaaaatgtagcgtttctatta	aaatctttggatta	aaatggtt	gtgtaat	GAAGTaa	ATGTCATGTGT	A	TACA	ccttaacattct	aaaaattg	tgttcttt	actttag	aaaattca	
P. Abe	atgtgttt	aaacaaagaaaatgtagcgtttctatta	aaatctttggatta	aaatggtt	gtgtaat	GAAGTaa	ATGTCATGTGT	A	TACA	cacttaacattct	aaaaattg	tgttcttt	actttag	aaaattca	
C. Jac	atgtgttt	aaacaaagaaaatgtagcgtttctatta	aaatctttggatta	aaatggtt	gtgtaat	GAAGTaa	ATGTCATGTGT	A	TACA	cacttaacattct	aaaaattg	tgttcttt	actttag	aaaattca	
M. Mus	acgtgttt	aaacaaag- agatggagcg	tttctatta	aaatctttggatta	aaatggtt	gtgtaat	GAAGTaa	ATGTCATGTGT	A	TACA	caattaaaattct	aaaaattg	tgttcttcc	acttcag	aaaattca
R. Nor	atgtgttt	aaacaaag- agatgaagcg	tttctatta	aaatctttggatta	aaatggtt	gtgtaat	GAAGTaa	ATGTCATGTGT	A	TACA	caattaaaattct	aaaaattg	tgttcttcc	acttcag	aaaattca
C. Por	atgtgttt	aaacaaagaaaatgtagcatttctatta	aaatctttggatta	aaatggtt	gtgtaat	GAAGTaa	ATGTCATGTGT	A	TACA	cacttaaaattct	aaaaattg	tgttctttc	cttttag	aaaattca	
U. Cun	atgtcctt	aaacaaagaaaatgtagcatttctatta	aaatctttggatta	aaatggtt	gtgtaat	GAAGTaa	ATGTCATGTGT	A	TACA	cacttaaaattct	aaaaattg	tgttctttc	cttttag	aaaattca	
C. Fam	atgtgttt	aaacaaagaaaatgtagcatttctatta	aaatctttggatta	aaatggtt	gtgtaat	AATGAAGTaa	ATGTCATGTGT	A	TACA	cacttaaaattct	aaaaattg	tgttctttc	cttttag	aaaattca	
B. Tau	atgtgttt	aaacaaagaaaatgtagcatttctatta	aaatctttggatta	aaatggtt	gtgtaat	GAAGTaa	ATGTCATGTGT	A	TACA	cacttaaaattct	aaaaattg	tgttctttc	cttttag	aaaattca	
E. Cab	atgtgttt	aaacaaagaaaatgtagcatttctatta	aaatctttggatta	aaatggtt	gtgtaat	GAAGTaa	ATGTCATGTGT	A	TACA	cacttaaaattct	aaaaattg	tgttctttc	cttttag	aaaattca	
S. Sus	atgtgttt	aaacaaagaaaatgtagcatttctatta	aaatctttggatta	aaatggtt	gtgtaat	GAAGTaa	ATGTCATGTGT	A	TACA	cacttaaaattct	aaaaattg	tgttctttc	cttttag	aaaattca	
L. Afr	atgtgcctt	aaacaaagaaaatgtagcatttctatta	aaatctttggatta	aaatggtt	gtgtaat	GAAGTaa	ATGTCATGTGT	A	TACA	cacttaaaattct	aaaaattg	tgttctttc	cttttag	aaaattca	
	* * *	*****	* ** ** *	*****	* **** *****	***	*****	***	*****	*****	*****	*****	*****	*** **	

id=736897 gene=ENSG0000078098 name=FAP segment=chr2.163039979.163040093_-1 type=AN

H. Sap	actataag	gtaagtgtttcc...251...	tgcctaaggtctcactcata	TGTAACATATG	ACATaa	ACTTT	cagtttttcaaactaagaat	----	...162...	tctctttccag	aattcaac	
R. Mac	actacaaa	gtaagtgtttcc...251...	tgcctaaggtctcactcata	TGTAa	CATATG	ACATaa	ACTTT	cagtttttcaaactaagaat	----	...162...	tctctttccag	aattcaac
P. Tro	actataaaa	gtaagtgtttcc...250...	tgcctaaggtctcactcata	TGTAACATATG	ACATaa	ACTTT	cagtttttcaaactaagaat	----	...162...	tctctttccag	aattcaac	
P. Abe	actataaaa	gtaagtgtttcc...251...	tgcctaaggtctcactcata	TGTAa	CATATG	ACATaa	ACTTT	cagtttttcaaactaagaat	----	...162...	tctctttccag	aattcaac
C. Jac	actataaaa	gtaagtgttgcc...251...	tgcctaaggtctcactcata	TGTAa	CATATG	ACATaa	ACTTT	cagtttttcaaactaagaat	----	...162...	tctctttccag	aattcaac
M. Mus	actataaaa	gtaagcatttcc...242...	tgcctaaggtctcactcata	TGTAa	CATATG	ACATaa	ACTTT	cagtttttcaaactaagaat	----	...162...	cttctttccag	aattcaac
R. Nor	actataaaa	gtaagcatttcc...251...	tgcctaaggtctcactcata	TGTAa	CATATG	ACATaa	ACTTT	cagcttctcaaagtaagaat	----	...161...	ctcctttccag	aattcaac
C. Por	actataaaa	gtaagcatcttc...235...	tgcctaaggtctcactcata	TGTAa	CATATG	ACATaa	ACTTT	cagcttctcaaactaagaat	----	...161...	cctctttccag	aattcaac
U. Cun	actataaaa	gtaagcatttcc...245...	tgcctaaggtctcactcata	TGTAa	CATATG	ACATaa	ACTTT	cagtttttcaaactaagaat	----	...161...	cctctttccag	aattcaac
C. Fam	actacaaa	gtaagcgtttc...250...	tgcctaaggtctcactcata	TGTAa	CATATG	ACATaa	ACTTT	ccCGTTttcaaactaagaatcagat	...156...	cctctttccag	aattcaac	
B. Tau	actataaaa	gtaagcatttcc...233...	tgcctaaggtctcactcata	TGTAa	CATATG	ACATaa	ACTTT	cagtttttcaaactaagaat	----	...161...	cccctttccag	aattcaac
E. Cab	actataaaa	gtaagcatttcc...250...	tgcctaaggtctcactcata	TGTAa	CATATG	ACATaa	ACTTT	cagtttttcaaagtaagaat	----	...161...	cctctttccag	aattcaac
S. Sus	attacaaa	gtaagcatttcc...253...	tgcctaaggtctcactcata	TGTAa	CATATG	ACATaa	aaagcttcagtttttcaaac	-----	...168...	cctctttccag	aattcaac	
L. Afr	actataaaa	gtaagcatttcc...252...	tgcctaaggtctcactcata	TGTAa	CATATG	ACATaa	ACTTT	cagtttttcaaactcagaat	----	...161...	tctctttccag	aattcaac
	* * *	*****	*	*****	*****	* * *	*****	*****	*****	*****	*****	

id=736905 gene=ENSG0000078098 name=FAP segment=chr2.163029732.163030232_-1 type=IN VIEW

Figure 438:



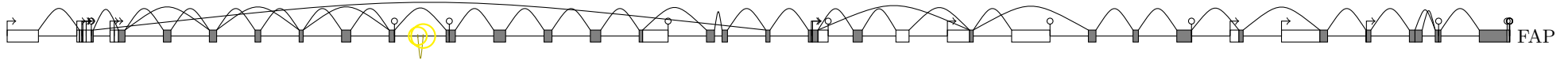
H. Sap	actataag	gtaagtgtttcc...314...-----tcagatggaagtaatgcaaa	TGATG	TGAAAATGTGTTGCT	ctgactcttaaatattt	atc...102...tctctttccag	aattcaac	
R. Mac	actacaaa	gtaagtgtttcc...314...-----tcagatggaagtaatgcaaa	TGATG	TGAAAATGTGTTGCT	ctgactcttaaatattt	atc...102...tctctttccag	aattcaac	
P. Tro	actataaa	gtaagtgtttcc...313...-----tcagatggaagtaatgcaaa	TGATG	TGAAAATGTGTTGCT	ctgactcttaaatattt	atc...102...tctctttccag	aattcaac	
P. Abe	actataaa	gtaagtgtttcc...314...-----tcagatggaagtaatgcaaa	TGATG	TGAAAATGTGTTGCT	ctgactcttaaatattt	atc...102...tctctttccag	aattcaac	
C. Jac	actataaa	gtaagtgttgc...314...-----tcagatggaagtaatgcaaa	TGATG	TGAAAATGTGTTGCT	ctgactcttaaatattt	atc...102...tctctttccag	aattcaac	
M. Mus	actataaa	gtaagcatttc...299...taagaatcagatggaagtaa	TGCAaa	TGATG	TGAAAATGTGTTGCT	ctgactcttaaatattt	atc...102...cttctttccag	aattcaac
R. Nor	actataaa	gtaagcatttc...320...-----gggagtaatgcaaatgccga	TGAAAATGTGTTGCT	ctgactcttaaatattt	atc...101...ctcctttccag	aattcaac		
C. Por	actataaa	gtaagcatcttc...298...-----tcagatggaagtaatgcaaa	TGATG	TGAAAATGTGTTGCT	ctgactcttaaatattt	atc...101...cctctttccag	aattcaac	
D. Cun	actataaa	gtaagcatttc...308...-----tcagatggaagtaatgcaaa	TGATG	TGAAAATGTGTTGCT	ctggctcttaaatattt	atc...101...cctctttccag	aattcaac	
C. Fam	actacaaa	gtaagcgtcttc...313...-----tcagatggaagtaatgcaaa	TGATG	TGAAAATGTGTTGCT	ctgactcttaaatattt	atc...101...cctctttccag	aattcaac	
F. Cat	actataaa	gtaagcatgttc...317...-----tcagatggaagtaatgcaaa	TGATG	TGAAAATGTGTTGCT	ctgactcttaaatattt	atc...101...cctctttccag	aattcaac	
B. Tau	actataaa	gtaagcatttc...296...-----tcagatggaagtaatgcaaa	TGATG	TGAAAATGTGTTGCT	ctgactcttaaatattt	atc...101...cccctttccag	aattcaac	
E. Cab	actataaa	gtaagcatttc...313...-----tcagatggaagtaatgcaaa	TGATG	TGAAAATGTGTTGCT	ctgactcttaaatattt	atc...101...cctctttccag	aattcaac	
L. Afr	actataaa	gtaagtatttc...321...-----agaagtaatgcaaatgatga	TGAAAATGTGTTGCT	ctgactcttaaatattt	atc...101...tctctttccag	aattcaac		
	**** *	***** *	*	*****	*****	*****	*****	

id=736905 gene=ENSG0000078098 name=FAP segment=chr2.163029732.163030232.-1 type=IN

H. Sap	actataag	gtaagtgtttcc...361...cttaaatattt	atcaagcaa	AGCAATACAT	aaTTTCAG	TATTG	gtgctaagtcattgcacaa	-----...53...tctctttccag	aattcaac
R. Mac	actacaaa	gtaagtgtttcc...361...cttaaatattt	atcaagcaa	AGCAATACAT	aaTTTCAG	TATTG	gtgctaagtcattgcacaa	-----...53...tctctttccag	aattcaac
P. Tro	actataaa	gtaagtgtttcc...360...cttaaatattt	atcaagcaa	AGCAATACAT	aaTTTCAG	TATTG	gtgctaagtcattgcacaa	-----...53...tctctttccag	aattcaac
P. Abe	actataaa	gtaagtgtttcc...361...cttaaatattt	atcaagcaa	AGCAATACAT	aaTTTCAG	TATTG	gtgctaagtcattgcacaa	-----...53...tctctttccag	aattcaac
C. Jac	actataaa	gtaagtgttgc...361...cttaaatattt	atcaagcaa	AGCAATACAT	aaTTTCAG	TATTG	gtgctaagtcattgcacaa	-----...53...tctctttccag	aattcaac
M. Mus	actataaa	gtaagcatttc...352...cttaaatattt	atcaagcaa	AGCAATACAT	aaTTTCAG	TATTG	TGCGA	agtcattgcacaatgatt...48...cttctttccag	aattcaac
R. Nor	actataaa	gtaagcatttc...361...cttaaatattt	atcaagcaa	AGCAATACAT	aaTTTCAG	TATTG	gtgctaagtcattgcacaa	-----...58...ctcctttccag	aattcaac
C. Por	actataaa	gtaagcatcttc...345...cttaaatattt	atcaagcaa	AGCAATACAT	aaTTTCAG	TATTG	gtgctaagtcattgcacaa	-----...52...cctctttccag	aattcaac
D. Cun	actataaa	gtaagcatttc...355...cttaaatattt	atcaagcaa	AGCAATACAT	aaTTTCAG	TATTG	gtgctaagtcattgcacaa	-----...52...cctctttccag	aattcaac
C. Fam	actacaaa	gtaagcgtcttc...360...cttaaatattt	atcaagcaa	AGCAATACAT	aaTTTCAG	TATTG	gtgctaagtcattgcacaa	-----...52...cctctttccag	aattcaac
F. Cat	actataaa	gtaagcatgttc...364...cttaaatattt	atcaagcaa	AGCAATACAT	aaTTTCAG	TATTG	gtgctaagtcattgcacaa	-----...52...cctctttccag	aattcaac
B. Tau	actataaa	gtaagcatttc...343...cttaaatattt	atcaagcaa	AGCAATACAT	aaTTTCAG	TATTG	gtgctaagtcattgcacaa	-----...52...cccctttccag	aattcaac
E. Cab	actataaa	gtaagcatttc...360...cttaaatattt	atcaagcaa	AGCAATACAT	aaTTTCAG	TATTG	gtgctaagtcattgcacaa	-----...52...cctctttccag	aattcaac
L. Afr	actataaa	gtaagtatttc...362...cttaaatattt	atcaagcaa	AGCAATACAT	aaTTTCAG	TATTG	gtgctaagtcattgcacaa	-----...58...tctctttccag	aattcaac
	**** *	***** *	*	*****	*****	*****	*****	*****	*****

id=736905 gene=ENSG0000078098 name=FAP segment=chr2.163029732.163030232.-1 type=IN VIEW

Figure 439:



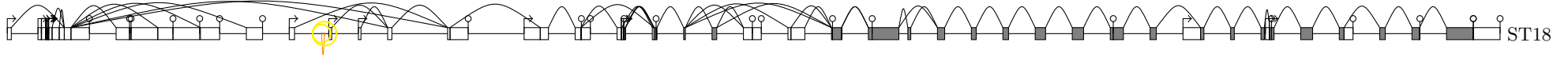
H. Sap	gtaa	atta	gtaagtgttttaa...253...ggaaaaaatatggttttcaca	AGTTtc	CCAGACTAG	cttcagacaacatgaaattt...337...caccacttttag	gcatatgt
R. Mac	gtaa	atta	gtaagtgttttaa...255...ggaaaaaatatggttttcaca	AGTTtc	CCAGACTAG	cttcagacaacatgaaattt...337...caccacttctag	gcatatgt
P. Tro	gtaa	atta	gtaagtgttttaa...253...ggaaaaaatatggttttcaca	AGTTtc	CCAGACTAG	cttcagacaacatgaaattt...337...caccacttttag	gcatatgt
P. Abe	gtaa	atta	gtaagtgttttaa...254...ggaaaaaatatggttttcaca	AGTTtc	CCAGACTAG	cttcagacaacatgaaattt...337...caccacttttag	gcatatgt
C. Jac	gtaa	atta	gtaagtgttttaa...253...ggaaaaaatatggttttcaca	AGTTtc	CCAGACTAG	cttcagacaacatgaaattt...375...ctccacttctag	gcatatgt
M. Mus	gtaa	atta	gtaagtgttttag...289...ggaaaaaatatggttttcaca	AGTTtc	CCAGACTAG	cttcagacaacatgaaattt...326...taccattttcag	gcatatgt
R. Nor	ctgt	gtgt	gtgtgtgtgtgt...211...ggaaaaaatatggttttcaca	AGTTtc	CCAGACTAG	cttcagacaacatgaaattt...333...tatcatttctag	gcatatgt
C. Por	gtaa	acta	gtacgtgttttaa...258...ggaaaaaatatggttttcaca	AGTTtc	CCAGACTAG	cttcagacaacatgaaattt...302...taccacttccag	gcatatgt
O. Cun	gcaa	atta	gtaagtatttaa...252...ggaaaaaatatggttttcaca	AGTTtc	CCAGACTAG	cttcagacaacatgaaattt...341...caccacttctag	gcatatgt
C. Fam	gtaa	atta	gtaagtgttttaa...252...ggaaaaaatatggttttcaca	AGTTtc	CCAGACTAG	cttcagacaacatgaaattt...355...cattacttctag	gcatatgt
B. Tau	gtaa	atta	gtaagtgttttaa...249...ggaaaaaatatggttttcaca	AGTTtc	CCAGACTAG	cttcagacaacatgaaattt...368...caccacttctag	gcatatgt
E. Cab	gtaa	atta	gtaagcgttttaa...252...ggaaaaaatatggttttcaca	AGTTtc	CCAGACTAG	cttcagacaacatgaaattt...348...caccttctag	gcatatgt
S. Sus	gtaa	atta	gtaagtgttttaa...254...ggaaaaaatatggttttcaca	AGTTtc	CCAGACTAG	cttcagacaacatgaaattt...365...caccacttctag	gcatatgt
O. Avi	gtaa	atta	gtaagtgttttaa...249...ggaaaaaatatggttttcaca	AGTTtc	CCAGACTAG	cttcagacaacatgaaattt...360...caccacacctag	gcatatgt
			** * *	*****		** *****	

id=736857 gene=ENSG0000078098 name=FAP segment=chr2.163075694_163076362_-1 type=IN

H. Sap	gtaa	atta	gtaagtgttttaa...323...ttaaggactctaaataaaga	TTAGa	TCTGGctAGCT	attaatattcagagatttat...266...caccacttttag	gcatatgt
R. Mac	gtaa	atta	gtaagtgttttaa...325...ttaaggactctaaataaaga	TTAGa	TCTGGctAGCT	attaatattcagagatttat...266...caccacttctag	gcatatgt
P. Tro	gtaa	atta	gtaagtgttttaa...323...ttaaggactctaaataaaga	TTAGa	TCTGGctAGCT	attaatattcagagatttat...266...caccacttttag	gcatatgt
P. Abe	gtaa	atta	gtaagtgttttaa...324...ttaaggactctaaataaaga	TTAGa	TCTGGctAGCT	attaatattcagagatttat...266...caccacttttag	gcatatgt
C. Jac	gtaa	atta	gtaagtgttttaa...323...ttaaggactctaaataaaga	TTAGa	TCTGGctAGCT	attaatattcagagatttat...304...ctccacttctag	gcatatgt
M. Mus	gtaa	atta	gtaagtgttttag...359...ttaaggactctaaataaaga	TTAGa	TCTGGctAGCT	attaatattcagagatttat...255...taccattttcag	gcatatgt
R. Nor	ctgt	gtgt	gtgtgtgtgtgt...281...ttaaggactctaaataaaga	TTAGa	TCTGGctAGCT	attaatattcagagatttat...262...tatcatttctag	gcatatgt
C. Por	gtaa	acta	gtacgtgttttaa...328...ttaaggactctaaataaaga	TTAGa	TCTGGctAGCT	attaatattcagagatttat...231...taccacttccag	gcatatgt
O. Cun	gcaa	atta	gtaagtatttaa...322...ttaaggactctaaataaaga	TTAGa	TCTGGctAGCT	attaatattcagagatttat...270...caccacttctag	gcatatgt
C. Fam	gtaa	atta	gtaagtgttttaa...322...ttaaggactctaaataaaga	TTAGa	TCTGGctAGCT	attaatattcagagatttat...284...cattacttctag	gcatatgt
B. Tau	gtaa	atta	gtaagtgttttaa...319...ttaaggactctaaataaaga	TTAGa	TCTGGctAGCT	attaatattcagagatttat...297...caccacttctag	gcatatgt
E. Cab	gtaa	atta	gtaagcgttttaa...322...ttaaggactctaaataaaga	TTAGa	TCTGGctAGCT	attaatattcagagatttat...277...caccttctag	gcatatgt
S. Sus	gtaa	atta	gtaagtgttttaa...324...ttaaggactctaaataaaga	TTAGa	TCTGGctAGCT	attaatattcagagatttat...294...caccacttctag	gcatatgt
O. Avi	gtaa	atta	gtaagtgttttaa...319...ttaaggactctaaataaaga	TTAGa	TCTGGctAGCT	attaatattcagagatttat...289...caccacacctag	gcatatgt
			** * *	*****	*****	* ****	** *****

id=736857 gene=ENSG0000078098 name=FAP segment=chr2.163075694_163076362_-1 type=IN VIEW

Figure 440: CS=8.4



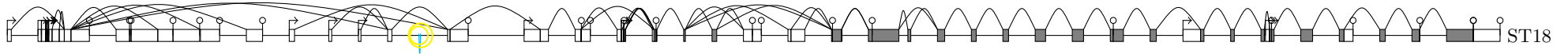
H. Sap	acaaaaaa	gtaagtttaaaa...4651...agaaaatgcatcagccatt	GTACCCTGGCAGCTaaTGAG	attggtcgttaagtaaatga...102...gctttattctac	atcactgc
R. Mac	acaaaaaa	gtaagtttaaaa...4656...agaaaatgcatcagccatt	GTACCCTGGCAGCTaaTGAG	attggtcgttaagtaaatga...102...gctttattctac	atcactgc
P. Tro	acaaaaaa	gtaagtttaaaa...4642...agaaaatgcatcagccatt	GTACCCTGGCAGCTaaTGAG	attggtcgttaagtaaatga...102...gctttattctac	atcactgc
P. Abe	acaaaaaa	gtaagtttaaaa...4677...agaaaatgcatcagccatt	GTACCCTGGCAGCTaaTGAG	attggtcgttaagtaaatga...102...gctttattctac	atcactgc
C. Jac	acaaaaaa	gtaagtttaaaa...4582...agaaaatgcatcagccatt	GTACCCTGGCAGCTaaTGAG	attggtcgttaagtaaatga...102...gctttattctac	atcactgc
M. Mus	acaaaaaa	gtaagtttcaaa...4479...agaaaatgcatcagccatt	GTACCCTGGCAGCTaaTGAG	attggtcgttaagtaaatga...114...gctttattctac	atcactgc
R. Nor	acaaaaaa	gtaagtttaaaa...4799...agaaaatgcatcagccatt	GTACCCTGGCAGCTaaTGAG	attggtcgttaagtaaatga...106...gctttattctac	atcactgc
C. Por	acagaaaa	gtaagtttaaaa...4550...agaaaatgcatcagccatt	GTACCCTGGCAGCTaaTGAG	attggtcgttaagtaaatga...100...gctttattctac	atcactgc
O. Cun	acaaaaaa	gtaagttttcaa...4602...agaaaatgcatcagccatt	GTACCCTGGCAGCTaaTGAG	attggtcgttaagtaaatga...101...gctttattctac	atcactgc
C. Fam	acaaaaaa	gtaagtttaaaa...4617...agaaaatgcatcagccatt	GTACCCTGGCAGCTaaTGAG	attggtcgttaagtaaatga...102...gctttattctac	atcactgc
B. Tau	acaaaaaa	gtaagttggaaa...4649...agaaaatgcatcagccatt	GTACCCTGGCAGCTaaTGAG	attggtcgttaagtaaatga...102...gctttattctac	atcactgc
E. Cab	acaaaaaa	gtaagtttaaaa...4564...agaaaatgcatcagccatt	GTACCCTGGCAGCTaaTGAG	attggtcgttaagtaaatga...102...gctttattctac	atcactgc
S. Sus	acaaaaaa	gtaagttcaaaa...4582...agaaaatgcatcagccatt	GTACCCTGGCAGCTaaTGAG	attggtcgttaagtaaatga...99...gctttattctac	atcactgc
O. Avi	acaaaaaa	gtaagttgaaaa...4639...agaaaatgcatcagccatt	GTACCCTGGCAGCTaaTGAG	attggtcgttaagtaaatga...102...gctttattctac	atcactgc
L. Afr	acaaaaaa	gtaagtttaaaa...4535...agaaaatgcatcagccatt	GTACCCTGGCAGCTaaTGAG	attggtcgttaagtaaatga...103...gctttattctac	atcactgc
	*** **	***** **	*****	*****	*** ** * *

id=13743 gene=ENSG00000147488 name=ST18 segment=chr8.53161973.53166809_-1 type=IN

H. Sap	acaaaaaa	gtaagtttaaaa...4711...cacaaagcctacaaaaaaag	CTTAgcAGCTcaCTAGaGTAT	cacagagtgtcccctgcacac---41...gctttattctac	atcactgc
R. Mac	acaaaaaa	gtaagtttaaaa...4716...cacaaagcctacaaaaaaag	CTTAgcAGCTcaCTAGaGTAT	cacagagtgtcccctgcacac---41...gctttattctac	atcactgc
P. Tro	acaaaaaa	gtaagtttaaaa...4702...cacaaagcctacaaaaaaag	CTTAgcAGCTcaCTAGaGTAT	cacagagtgtcccctgcacac---41...gctttattctac	atcactgc
P. Abe	acaaaaaa	gtaagtttaaaa...4737...cacaaagcctacaaaaaaag	CTTAgcAGCTcaCTAGaGTAT	cacagagtgtcccctgcacac---41...gctttattctac	atcactgc
C. Jac	acaaaaaa	gtaagtttaaaa...4642...cacaaagcctacaaaaaaag	CTTAgcAGCTcaCTAGaGTAT	cacagagtgtcccctgcacac---41...gctttattctac	atcactgc
M. Mus	acaaaaaa	gtaagttttcaaa...4553...aaaaaaacacaaaaaaag	CTTA-cAGCTcaCTAGaGTAT	cagagagtgtcccctgcacac---40...gctttattctac	atcactgc
R. Nor	acaaaaaa	gtaagtttaaaa...4865...-----gcctacaaaaaaacacaaaaaaag	CTTA-cAGCTcaCTAGaGTAT	cacagagtgtcccctgcacac---40...gctttattctac	atcactgc
C. Por	acagaaaa	gtaagtttaaaa...4610...cacaaagcctacaaaaaaag	CTTA-cAGCTcaCTAGaGTAT	cacagagtgtcccctgcacac---40...gctttattctac	atcactgc
O. Cun	acaaaaaa	gtaagttttcaa...4662...cacaaagcctacaaaaaaag	CTTAgcAGCTcaCTAGaGTAT	cacagagtgtcccctgcacac---40...gctttattctac	atcactgc
C. Fam	acaaaaaa	gtaagtttaaaa...4677...cacaaagcctacaaaaaaag	CTTAgcAGCTcaCTAGaGTAT	cacagagtgtcccctgcacac---41...gctttattctac	atcactgc
B. Tau	acaaaaaa	gtaagttggaaa...4709...cacaaagcctacaaaaaaag	CTTAgcAGCTcaCTAGaGTAT	cacagagtgtcccctgcacac---41...gctttattctac	atcactgc
E. Cab	acaaaaaa	gtaagtttaaaa...4624...cacaaagcctacaaaaaaag	CTTAgcAGCTcaCTAGaGTAT	cacagagtgtcccctgcacac---41...gctttattctac	atcactgc
S. Sus	acaaaaaa	gtaagttcaaaa...4642...cacaaagcctacaaaaaaag	CTTAgcAGCTcaCTAGaGTAT	ccc--agtgtcccctgcacacca...38...gctttattctac	atcactgc
O. Avi	acaaaaaa	gtaagttgaaaa...4699...cacaaagcctacaaaaaaag	CTTAgcAGCTcaCTAGaGTAT	cacagagtgtcccctgcacac---41...gctttattctac	atcactgc
L. Afr	acaaaaaa	gtaagtttaaaa...4596...acaaagcctacaaaaaaag	CTTAgcAGCTcaCTAGaGTAT	cacagagtgtcccctgcacac---41...gctttattctac	atcactgc
	*** **	***** **	*** *****	*****	*** ** * *

id=13743 gene=ENSG00000147488 name=ST18 segment=chr8.53161973.53166809_-1 type=IN VIEW

Figure 441:



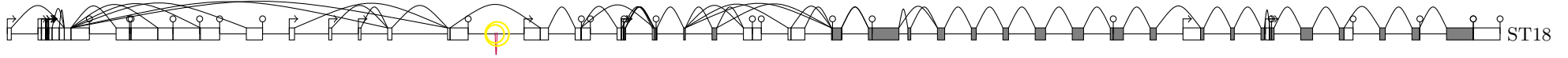
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R. Mac	agactaag	gt-aacatgtaa...4527...agcagtgaaggtaattaac	CCTGGGAAAAGTACAG	ctgccgtgctgggctgttcct...382...gcttttcctcag	gagtgatg
P. Tro	agactaag	gt-aacatgtaa...4528...agcagtgaaggtaattaac	CCTGGGAAAAGTACAG	ctgccgtgctgggctgttcct...381...gcttttcctcag	gagtgatg
P. Abe	agactaag	gt-aacatgtaa...4531...agcagtgaaggtaattaac	CCTGGGAAAAGTACAG	ctgccgtgctgggctgttcct...378...gcttttcctcag	gagtgatg
C. Jac	agactaag	gt-aacatgtaa...4532...agcagtgaaggtaattaac	CCTGGGAAAAGTACAG	ctgccgtgctgggctgttcct...377...gcttttcctcag	gagcgatg
C. Por	agtctaag	gt-aaagtgttca...4539...agcagtgaaggtaattaac	CCTGGGAAAAGTACAG	ctgccgtgctgggctgttcct...370...gctttcactctg	tagcaatg
O. Cun	agtctaag	gt-aacacaataa...4540...agcagtgaaggtaattaac	CCTGGGAAAAGTACAG	ctgccgtgctgggctgttcct...369...gctgcttctcta	tagcaatg
C. Fam	agcataag	gt-aataagtaa...4550...agcagtgaaggtaattaac	CCTGGGAAAAGTACAG	ctgccgtgctgggctgttcct...359...gcttctcatcag	tagcaatg
F. Cat	agtctaag	gt-aacacgtaa...4549...agcagtgaaggtaattaac	CCTGGGAAAAGTACAG	ctgccgtgctgggctgttcct...360...gcttctcatcag	tagcaatg
B. Tau	agtctaag	gtaaacaagtta...4537...agcagtgaaggtaattaac	CCTGGGAAAAGTACAG	ctgccgtgctgggctgttcct...372...acttctgtcca	tagcaatg
E. Cab	agtctaag	gt-aacaagtaa...4534...agcagtgaaggtaattaac	CCTGGGAAAAGTACAG	ctgccgtgctgggctgttcct...375...gcttctcattgg	tagcaatg
S. Sus	aggctaag	gt-aaccggttaa...4534...agcagtgaaggtaattaac	CCTGGGAAAAGTACAG	ctgccgtgctgggctgttcct...375...gcttctcatcag	tagcaatg
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id=13749 gene=ENSG00000147488 name=ST18 segment=chr8.53142638.53159145.-1 type=IN

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R. Mac	agactaag	gt-aacatgtaa...4555...aagtacagctgccgtgctggg	CTGTTcCTTTCTgTAGG	atctgattagaaattagtgt...353...gcttttcctcag	gagtgatg
P. Tro	agactaag	gt-aacatgtaa...4556...aagtacagctgccgtgctggg	CTGTTcCTTTCTgTAGG	atctgattagaaattagtgt...352...gcttttcctcag	gagtgatg
P. Abe	agactaag	gt-aacatgtaa...4559...aagtacagctgccgtgctggg	CTGTTcCTTTCTgTAGG	atctgattagaaattagtgt...349...gcttttcctcag	gagtgatg
C. Jac	agactaag	gt-aacatgtaa...4560...aagtacagctgccgtgctggg	CTGTTcCTTTCTgTAGG	atctgattagaaattagtgt...348...gcttttcctcag	gagcgatg
C. Por	agtctaag	gt-aaagtgttca...4567...aagtacagctgccgtgctggg	CTGTTcCTTTCTgTAGG	atctgattagaaattagtgt...341...gctttcactctg	tagcaatg
O. Cun	agtctaag	gt-aacacaataa...4568...aagtacagctgccgtgctggg	CTGTTcCTTTCTgTAGG	atctgattagaaattagtgt...340...gctgcttctcta	tagcaatg
C. Fam	agcataag	gt-aataagtaa...4578...aagtacagctgccgtgctggg	CTGTTcCTTTCTgTAGG	atctgattagaaattagtgt...330...gcttctcatcag	tagcaatg
F. Cat	agtctaag	gt-aacacgtaa...4577...aagtacagctgccgtgctggg	CTGTTcCTTTCTgTAGG	atctgattagaaattagtgt...331...gcttctcatcag	tagcaatg
B. Tau	agtctaag	gtaaacaagtta...4565...aagtacagctgccgtgctggg	CTGTTcCTTTCTgTAGG	atctgattagaaattagtgt...343...acttctgtcca	tagcaatg
E. Cab	agtctaag	gt-aacaagtaa...4562...aagtacagctgccgtgctggg	CTGTTcCTTTCTgTAGG	atctgattagaaattagtgt...346...gcttctcattgg	tagcaatg
S. Sus	aggctaag	gt-aaccggttaa...4562...aagtacagctgccgtgctggg	CTGTTcCTTTCTgTAGG	atctgattagaaattagtgt...346...gcttctcatcag	tagcaatg
L. Afr	gtctaag	gt-aacatatgaa...4557...aagtacagctgccgtgctggg	CTGTTcCTTTCTgTAGG	atctgattagaaattagtgt...351...gctccttatcag	tagcaata
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id=13749 gene=ENSG00000147488 name=ST18 segment=chr8.53142638.53159145.-1 type=IN VIEW

Figure 442:



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P. Tro	ctgaaatc	tgtgattatggtt...4874...tcccttatgtgattcagttc	TTTATTGGCAAT	ctttgagaaaataaatggaa...39...gacaaaaagcca	ttactttc
P. Abe	ctgaaatc	tgtgaatatggtt...4874...tcccttatgtgattcagttc	TTTATTGGCAAT	ctttgagaaaataaatggaa...39...gacaaaaagcca	ttactttc
C. Jac	ctgaaatc	tgggaatatggtt...4874...tcccttatgtgattcagttc	TTTATTGGCAAT	ctttgagaaaataaatggaa...39...gacaaaaagcca	ttactttc
M. Mus	ctgaaatt	ggtgagcatggtt...4874...tcccttatgogattccgttc	TTTATTGGCAAT	ctttgagaaaataaatggaa...39...gacagaaagcca	ttactttc
C. Por	ctaaaggc	tgagacaggaca...4874...tcccttatgtgattcagttc	TTTATTGGCAAT	ctttgagaaaataaatggaa...39...gacaaaaagcca	ttactttc
O. Cun	ctgaaatc	tgggaatacgtt...4874...tcccttatgtgattcagttc	TTTATTGGCAAT	ctttgagaaaataaatggaa...39...gacaaaaagcca	ttacttgc
C. Fam	ctgaaact	tgtggatatggtt...4874...tcccttatgtgattcagttc	TTTATTGGCAAT	ctttgagaaaataaatggaa...39...gacaaaaagcca	ttactttc
F. Cat	ctgaaacc	tgtggatacgtt...4874...tcccttatgtgattcagttc	TTTATTGGCAAT	ctttgagaaaataaatggaa...39...gacaaaaagcca	ttactttc
B. Tau	ctgaaacc	tgtgaatacgtt...4875...tcccttctgtgattcagttc	TTTATTGGCAAT	ctttgagaaaataaatggaa...38...gacaaaaagcca	ttactttc
E. Cab	ctgaaacc	tgtgaatatggtt...4874...tcccttatgtgattcagttc	TTTATTGGCAAT	ctttgagaaaataaatggaa...39...gacaaaaagcca	ttactttc
S. Sus	ctgaaacc	tgtgaatatggtt...4875...tcccttatgtgattcagttc	TTTATTGGCAAT	ctttgagaaaataaatggaa...38...gacaaaaagcca	ttactttc
O. Avi	ctgaaacc	tgtgaatacatt...4875...tcccttctgtgattcagttc	TTTATTGGCAAT	ctttgagaaaataaatggaa...38...gacaaaaagcca	ttactttc
L. Afr	ctagaata	tgtgatgatggtt...4874...tcccttatgtgattcagttc	TTTATTGGCAAT	ctttgagaaaataaatggaa...39...gacaaaaagcca	ttactttc
	* *	* * *	***** ** ****	*****	**** *****

id=13752 gene=ENSG00000147488 name=ST18 segment=chr8.53134656.53142252_-1 type=IN

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R. Mac	cggaaatc	tgtgaatatggtt...4911...agaaaataaatggaaaatgt	ATTGCTAATAAA	tacataaacacgatagggtattagacaaaaagcca	ttactttc
P. Tro	ctgaaatc	tgtgattatggtt...4911...agaaaataaatggaaaatgt	ATTGCTAATAAA	tacataaacacgatagggtattagacaaaaagcca	ttactttc
P. Abe	ctgaaatc	tgtgaatatggtt...4911...agaaaataaatggaaaatgt	ATTGCTAATAAA	tacataaacacgatagggtattagacaaaaagcca	ttactttc
C. Jac	ctgaaatc	tgggaatatggtt...4911...agaaaataaatggaaaatgt	ATTGCTAATAAA	tacataaacacgatagggtattagacaaaaagcca	ttactttc
M. Mus	ctgaaatt	ggtgagcatggtt...4911...agaaaataaatggaaaatgt	ATTGCTAATAAA	tacataaacacgatagggcattagacagaaagcca	ttactttc
C. Por	ctaaaggc	tgagacaggaca...4911...agaaaataaatggaaaatgt	ATTGCTAATAAA	tacataaacacgatagggtattagacaaaaagcca	ttactttc
O. Cun	ctgaaatc	tgggaatacgtt...4911...agaaaataaatggaaaatgt	ATTGCTAATAAA	tacataaacacgatagggtattagacaaaaagcca	ttacttgc
C. Fam	ctgaaact	tgtggatatggtt...4911...agaaaataaatggaaaatgt	ATTGCTAATAAA	tacataaacacgatagggtattagacaaaaagcca	ttactttc
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B. Tau	ctgaaacc	tgtgaatacgtt...4912...agaaaataaatggaaaatgt	ATTGCTAATAAA	cacacaccacgatagggtg-tagacaaaaagcca	ttactttc
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L. Afr	ctagaata	tgtgatgatggtt...4911...agaaaataaatggaaaatgt	ATTGCTAATAAA	tacataaacacgatagggtattagacaaaaagcca	ttactttc
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id=13752 gene=ENSG00000147488 name=ST18 segment=chr8.53134656.53142252_-1 type=IN VIEW

Figure 443:



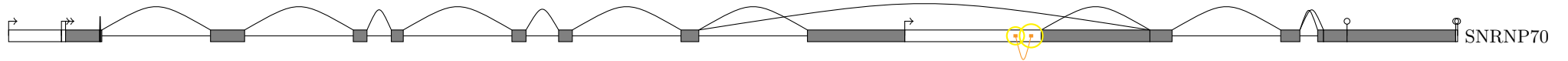
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M.Mus	agaaaggc	agcgggagacgg...112...tatgagctatcaaatgcaat	TACAttAAGACAGATTATACTGGGC	aaattgagccatttagaag	gtgagaat
R.Nor	agaaaggc	agcgggagtcgg...112...tatgagctatcaaatgcaat	TACAttAAGACAGATTATACTGGGC	aaattgagccatttagaag	gtgagaat
C.Por	agaaaggc	agcgggagcgg...112...tatgagctatcaaatgcaat	TACAttAAGACAGATTATA	ctgggcaaattgagccatttagaag	gtgagaat
O.Cun	agaaaggc	agcgggagacgg...112...tatgagctatcaaatgcaat	TACAttAAGACAGATTATA	ctgggcaaattgagccatttagaag	gtgagaat
C.Fam	agaaaggc	agcgggagacgg...111...tatgagctatcaaatgcaat	TACAttAAGACAGATTATA	ctgggcaaattgagccatttagaag	gtgagaat
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id=290226 gene=ENSG00000166407 name=LMO1 segment=chr11.8285219_8285405.-1 type=AN

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C.Jac	-accgcccgc	ccgtctgtgtgtgacccctcctggggcaggctgggcc	TGTA	AGTCTGTCTTCTGTA	TGTA	tataaatgggaacatttatt...45...tatgaatgtttc	cggggagg
M.Mus	-accactgc	ccatctctgtgggacccctcctggggccaggGCTCAG	TGTA	AGTCTGTCTT	TGTA	tataaatgggaacatttatt...45...tatgaatgtttc	cggggaca
R.Nor	-accgcccgc	ccatttcctgtggga-cctctcctggggccaggGCTCAG	TGTA	AGTCTGTCTT	TGTA	tataaatgggaacatttatt...45...tatgaatgtttc	cggggaca
C.Por	-gctgccac	ccctctgtgtgtgacccctcctggggccaggctgggcc	TGTA	AGTCTGTCTT	TGTA	tataaatgggaacatttatt...45...tatgaatgtttc	cggggata
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E.Cab	-accaccgc	ccgtctgtgtgtga-cctcctggggccaggctgggcc	TGTA	AGTCTGTCTT	TGTA	tataaatgggaacatttatt...45...tatgaatgtttc	tggggagg
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Figure 444:



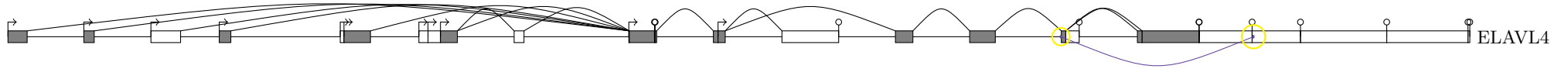
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R. Mac	tgctttct	gtggggctgcta...846...	ggtgtggggctctgtgcgct	GCTCaGGTAAg	CTTGGGGGCT	ccaggtaaagcggccccgtgt	-----	..82...	aggccggcatcg	gtaaatgg
P. Tro	tgctttct	atggggctgcta...858...	ggtgtggggctctgtgcgct	GCTCaGGTAAg	CTTGGGGGCT	ccaggtaaagcggccccgtgt	-----	..83...	aggccggcatcg	gtaaatgg
P. Abe	tgctttct	atggggctgcta...858...	ggtgtggggctctgtgcgct	GCTCaGGTAAg	CTTGGGGGCT	ccaggtaaagcggccccgtgt	-----	..84...	aggccggcatcg	gtaaatgg
C. Jac	tgctttct	gtggggctgcca...852...	ggtgtggggctctgtgcgct	GCTCaGGTAAg	CTTGGGGGCT	ccaggtaaagcggccccgtgt	-----	..83...	aggccggcatcg	gtaaatgg
M. Mus	tgacttct	gtggagtgtca...759...	gttgtgt-gagtgttcaggta	-----	AGCTTGGGGTCT	ccaggtaaagcggccccgtgt	-----	..94...	aggccggcatcg	gtaaatgg
C. Por	tccctgcc	atgggtctgtta...825...	----gc-gcctactcaggtaagctt	-----	GGGGGCTC	caGGTAAg	gc-gtcccgtgtgtcccacc	..78...	aggctggcatcg	gtaaatgg
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C. Fam	attcttct	gtggggctgtca...865...	ggtgtggggctctgtgcgct	GCTCaGGTAAg	CTTGGGGGCT	ccaggtaaagcggccccgtgt	-----	..82...	aggccggcatcg	gtaaatgg
F. Cat	gtgcttct	gtggggctgtca...861...	ggtgtggggctctgtgcgct	GCTCaGGTAAg	CTTGGGGGCT	ccaggtaaagcggccccgtgt	-----	..82...	aggccggcatcg	gtaaatgg
B. Tau	ccccttct	gcgggccatcac...845...	ggtgtggggctctgtgcgct	GCTCaGGTAAg	CTTGGGGGCT	ccaggtaaagcggccccgtgt	-----	..82...	aggccggcatcg	gtaaatgg
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P. Abe	tgctttct	atggggctgcta...930...	-ggaagcccgcctcctcgcca	GGCCCCAGGag	TTGCCGAGC	ccccccatcccgcctcggtttggacaccgcaaggccggcatcg			gtaaatgg
C. Jac	tgctttct	gtggggctgcca...923...	-ggaagcccgcctcctcgcca	GGCCCCAGGag	TTGCCGAGC	ccccccatcccgcctcggtttggacaccgcaaggccggcatcg			gtaaatgg
M. Mus	tgacttct	gtggagtgtca...832...	gggaagcccgcctcctcgcca	AGGcCCCAg	AGTT-g	ccggccccccatcccgcctcggtttggacaccgcaaggccggcatcg			gtaaatgg
C. Por	tccctgcc	atgggtctgtta...897...	-----cctcgccaggccccaggag	TTGCCGAGC	ccCCCC	catcccgcctcggtttggacaccgcaaggctggcatcg			gtaaatgg
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C. Fam	attcttct	gtggggctgtca...935...	-ggaagcccgcctcctcgcca	GGCCCCAGGag	TTGCCGAGC	ccccccatcccgcctcggtttggacaccgcaaggccggcatcg			gtaaatgg
F. Cat	gtgcttct	gtggggctgtca...931...	-ggaagcccgcctcctcgcca	GGCCCCAGGag	TTGCCGAGC	ccccccatcccgcctcggtttggacaccgcaaggccggcatcg			gtaaatgg
B. Tau	ccccttct	gcgggccatcac...915...	-ggaagcccgcctcctcgcca	GGCCCCAGGag	TTGCCGAGC	ccccccatcccgcctcggtttggacaccgcaaggccggcatcg			gtaaatgg
E. Cab	tgcttctt	gtggggctgtca...926...	-ggaagcccgcctcctcgcca	GGCCCCAGGag	TTGCCGAGC	ccccccatcccgcctcggtttggacaccgcaaggccggcatcg			gtaaatgg
O. Avi	ccccttct	gcgggccctcac...915...	-ggaagcccgcctcctcgcca	GGCCCCAGGag	TTGCCGAGC	ccccccatcccgcctcggtttggacaccgcaaggctggcatcg			gtaaatgg
L. Afr	gtggggctgtta...887...	-ggaagcccgcctcctcgcca	GGCCCCAGGag	TTGCCGAGC	ccccccatcccgcctcggtttggacaccgcaaggccggcatcg				gtaaatgg
	*	**	*****	*	*****	*****	*****	*****	*****

id=740528 gene=ENSG00000104852 name=SNRNP70 segment=chr19_49605819_49606844.1 type=AN VIEW

Figure 445: CS=8.4



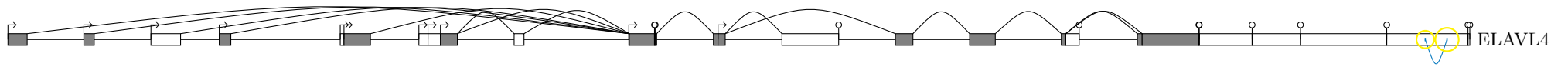
H.Sap	aggttcag	gtaggcatgccc...1589...---	tctgtgaggcattaaccag	AGACCCTC	ctTCTCTTTGCAG	gctggaca
R.Mac	aggttcag	gtaggcatgccc...1588...---	tctgtgaggcattaaccag	AGACCCTC	ctTCTCTTTGCAG	gctggaca
P.Tro	aggttcag	gtaggcatgccc...1578...---	tctgtgaggcattaaccag	AGACCCTC	ctTCTCTTTGCAG	gctggaca
P.Abe	aggttcag	gtaggcatgccc...1591...---	tctgtgaggcattaaccag	AGACCCTC	ctTCTCTTTGCAG	gctggaca
C.Jac	aggttcag	gtaggcatgccc...1573...ccatctgtgaggcattaacc	CAGAGACC	ctCCTTCTTTGCAG	gctggaca	
M.Mus	agattcag	gtaggcatgccc...1591...ccatctgcgaggcattaacc	CAGAGACC	ctCCTTCTTTGCAG	gctggaca	
R.Nor	agattcag	gtaggcacctgc...1567...---	tctgcgaggcattaaccag	AGACCCTC	ctTCTCTTTGCAG	gctggaca
C.Por	aggttcag	gtaggcctgccc...1508...---	tctgtgaggcattaaccag	AGACCCTC	ctTCTCTTTGCAG	gctggaca
O.Cun	aggttcag	gtaggcatgccc...1585...ccatctgtgaggcattaacc	CAGAGACC	ctCCTTCTTTGCAG	gctggaca	
C.Fam	aggttcag	gtaggcacagcc...1571...ccatctgtgaggcattaacc	CAGAGACC	ctCCTTCTTTGCAG	gctggaca	
B.Tau	aggttcag	gtaggtgtacc...1549...---	tctgtgaggcattaaccag	AGACCCTC	ctTCTCTTTGCAG	gctggaca
E.Cab	aggttcag	gtaggcatgccc...1554...---	tctgtgaggcattaaccag	AGACCCTC	ctTCTCTTTGCAG	gctggaca
L.Afr	aggttcag	gtaggtatgccc...1800...---	tctgtgaggcattaaccag	AGACCCTC	ctTCTCTTTGCAG	gctggaca
	** *****	*****	*	**** *****	*****	*****

id=761797 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50661459.50663100.1 type=IN

H.Sap	ttgTTGCc	AAAGAGGtgGTCT	ccttgctgaaaatgggttc-----	...381...aaaaattaaaaa	gattaatt
R.Mac	ttgTTGCc	AAAGAGGtgGTCT	ccttgctgaaaatgggttc-----	...381...aaaaattaaaaa	gattaatt
P.Tro	ttgTTGCc	AAAGAGGtgGTCT	ccttgctgaaaatgggttc-----	...381...aaaaattaaaaa	gattaatt
P.Abe	ttgTTGCc	AAAGAGGtgGTCT	ccttgctgaaaatgggttc-----	...378...aaaaattaaaaa	gattaatt
C.Jac	ttgTTGCc	AAAGAGGtGGTC	ctTTGctgaaaatgggttc	caagaa...376...aaaaattaaaaa	gattaatt
M.Mus	ttgTTGCc	AAAGAGGtGGTC	ctTTGctgaaaatgggttc	caagaa...370...aaaaattaaaaa	gattcatt
R.Nor	ttgTTGCc	AAAGAGGtgGTCT	ccttgctgaaaatgggttc-----	...375...aaaaattaaaaa	gattcatt
C.Por	ttgTTGCc	AAAGAGGtgGTCT	ccttgctgaaaatgggttc-----	...376...aaaaattaaaaa	gattaatt
O.Cun	ttgTTGCc	AAAGAGGtGGTC	ctTTGctgaaaatgggttc	caagaa...378...aaaaattaaaaa	gattaatt
C.Fam	ttgTTGCc	AAAGAGGtGGTC	ctTTGctgaaaatgggttc	caagaa...375...aaaaattaaaaa	gattaatt
B.Tau	ttgTTGCc	AAAGAGGtgGTCT	ccttgctgaaaatgggttc-----	...379...aaaaattaaaaa	gattaatt
E.Cab	ttgTTGCc	AAAGAGGtgGTCT	ccttgctgaaaatgggttc-----	...378...aaaaattaaaaa	gattaatt
L.Afr	ttgTTGCc	AAAGAGGtgGTCT	ccttgctgaaaatgggttc-----	...388...aaaagttaaaaa	gattaatt
	*****	*****	*****	**** *****	**** **

id=761805 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50667541.50667966.1 type=E3 VIEW

Figure 446: CS=3.9



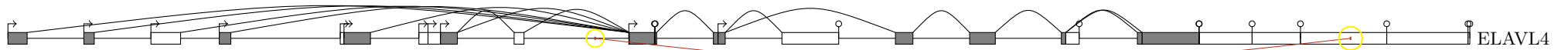
H. Sap	aaatacaa	gggttc	catgctc	...276...	-gctgcatcatagactcctcc-----	TTTAAATTTTTTCTgTTTTTTTCCTCTTTcGGTTtGGATATA	--acaccagatttcagttcaga-----	...328...	gtgtgtagaatg	gatttgac
R. Mac	aaatacaa	gggttc	catgctc	...276...	-gctgcatcatagactcctcc-----	TTTAAATTTTTTCTgTTTTTTTCCTCTTTcGGTTtGGATATA	--acaccagatttcagttcaga-----	...329...	gtgtgtagaatg	gatttgac
P. Tro	aaatacaa	gggttc	catgctc	...276...	-gctgcatcatagactcctcc-----	TTTAAATTTTTTCTgTTTTTTTCCTCT	-----tttctgttttgatataaca-----	...345...	gtgtgtagaatg	gatttgac
P. Abe	aaatacaa	gggttc	catgctc	...276...	-gctgcatcatagactcctcc-----	TTTAAATTTTTTCTgTTTTTTTCCTCTTTcGGTTtGGATATA	--acaccagatttcagttcaga-----	...328...	gtgtgtagaatg	gatttgac
C. Jac	aaatacaa	gggttc	catgctc	...281...	-----atcagagactccttcttca-----	ATTTTTTCTgTTTTTTTCCTCT-TTTtGGTTtGGATATA	ataacaccagatttcagtt-----	...334...	gtgtgtagaatg	gatctgac
R. Nor	aaatcaa	gagttc	catgctc	...276...	-gctgcatcatagactactcc-----	TTTAAATTTTTTCTaTTTTTTTCCTCTTTcGGTT	-----tttgagaaaaataaaaaa...345...	gtgtgtagaatg	aatttgag	
C. Por	aaatacaa	gagttc	catgctc	...283...	-----catagactcctccttataaa	TTTTTTTCCTC	-----ttttcagtttg-gaaaaa...339...	gtgtgtagaatg	aatttgag	
O. Cun	aaataaaa	gagttc	catgctc	...276...	-gctgcatcatagattcctcc-----	TTTAAATTTTTTCTaTTTTTtTTCCTCTTTtGGTT	-----ttggaaaaaaacaccaga...342...	gtgtgtagaatg	aatgtgag	
C. Fam	aaatacaa	gggttc	catgctc	...276...	-gctgcatcatagactcctcc-----	TTTAAATTTTTTCTgTTTTTTTCCTC	-----tttcggttcgggaaaaaa...366...	gtgtgtagaatg	gatttgag	
F. Cat	aaatacaa	gggttc	catgctc	...274...	-gctgcatcatagactcctcc-----	TTTAAATTTTTTCTgTTTTTTTCCTCT	-----tttcggttttgaaaaaaa...354...	gtgtgtagaatg	gatttgag	
B. Tau	aaatacaa	gggttc	catgctc	...274...	ggctgcgcgtagactcctc-----	CTTGAaTTTTTTTCTaTTTTTTTCCTCG	-----tttcggttttgagaaaaaa...362...	gtgtgtagaatg	gatttgag	
E. Cab	aaatacaa	ggattc	ctgctc	...276...	-gctgcatcatagactcctcc-----	TTTAAATTTTTTCTgTTTTTTTCCTCT	-----tttcggttttgacaaaaaac...347...	gtgtgtagaatg	gatttgag	
L. Afr	aaatacaa	gggttc	catgctc	...302...	ttttttttctggtttttt	TTTTTTTCCTCT	-----tttcagtttgagaaacaa...346...	gtgtgtagaatg	gatttgag	
	**** **	*	*** *****		* * *	*****	*	*****	** ***	

id=761807 gene=ENSG00000162374 name=ELAVL4 segment=chr1_50668727_50669442.1 type=E3

H. Sap	aaatacaa	gggttc	catgctc	...472...	tgccaaatcttctctataa- TGTGTTCAATC tGGGGGAAAAAAAAAAGG-- AAAAAAAAATcTTAGG accaggcagttgtatacttt...136...	gtgtgtagaatg	gatttgac			
R. Mac	aaatacaa	gggttc	catgctc	...472...	tgccaaatcttctctataa- TGTGTTCAATC tGGGGGAAAAAAAAAAGG-- AAAAAAAAATcTTAGG accaggcagttgtatacttt...137...	gtgtgtagaatg	gatttgac			
P. Tro	aaatacaa	gggttc	catgctc	...485...	-----tctataatgtgttcaatcctt- GGGGGAAAAAAAAAAGG -- AAAAAAAAATcTTAGG accaggcagttgtatacttt...136...	gtgtgtagaatg	gatttgac			
P. Abe	aaatacaa	gggttc	catgctc	...472...	tgccaaatcttctctataa- TGTGTTCAATC tGGGGGAAAAAAAAAAGG-- AAAAAAAAATcTTAGG accaggcagttgtatacttt...136...	gtgtgtagaatg	gatttgac			
C. Jac	aaatacaa	gggttc	catgctc	...476...	-gccaaatcttctctataaac GTGTTCAATC tGGGGGAAAAAAAAAAGG-- AAAAAAAAATcTTAGG accaggcagttgtatacttt...142...	gtgtgtagaatg	gatctgac			
R. Nor	aaatcaa	gagttc	catgctc	...488...	-----ctcttctctatgatgtgttc-- AATC tGGGGGAAAAAAAAAAGG-- AAAAAAAAATcTTAGG accaggcagttgtatacttt...136...	gtgtgtagaatg	aatttgag			
C. Por	aaatacaa	gagttc	catgctc	...473...	-----ctctacaatgtgttcaatcct- GGGGGAAAAAAAAAAGG --gaaaaaaaacttaggacca-----...149...	gtgtgtagaatg	aatttgag			
O. Cun	aaataaaa	gagttc	catgctc	...485...	-----ctcttctctataatgtgttc- AATC tGGGGGAAAAAAAAAAGG AAaAAAAAAAAATcTTAGG accaggcagttgtatacttt...134...	gtgtgtagaatg	aatgtgag			
C. Fam	aaatacaa	gggttc	catgctc	...503...	-----tctataatgtgttcaatcctt- GGGGGAAAAAAAAAAGG -- AAAAAAAAATcTTAGG accaggcagttgtatacttt...137...	gtgtgtagaatg	gatttgag			
F. Cat	aaatacaa	gggttc	catgctc	...492...	-----tctataatgtgttcaatcctt- GGGGGAAAAAAAAAAGG -- AAAAAAAAATcTTAGG accaggcagttgtatacttt...136...	gtgtgtagaatg	gatttgag			
B. Tau	aaatacaa	gggttc	catgctc	...498...	-----tctataatgtgttcaatcctt TGGGGGAAAAAAAAAAGG -- AAAAAAAAATcTTAGG accaggcagttgtatacttt...137...	gtgtgtagaatg	gatttgag			
E. Cab	aaatacaa	ggattc	ctgctc	...487...	-----tctataatgtgttcaatcctt- GGGGGAAAAAAAAAAGG -- AAAAAAAAATcTTAGG accaggcagttgtatacttt...136...	gtgtgtagaatg	gatttgag			
L. Afr	aaatacaa	gggttc	catgctc	...501...	-----tctataacgtgttcaatcgt- GGGGGAAAAAAAAAAGG -----tcttaggccaggcagttgt-----...147...	gtgtgtagaatg	gatttgag			
	**** **	*	*** *****		**** * *	** *****	**** **	*****	** ***	

id=761807 gene=ENSG00000162374 name=ELAVL4 segment=chr1_50668727_50669442.1 type=E3 VIEW

Figure 447:



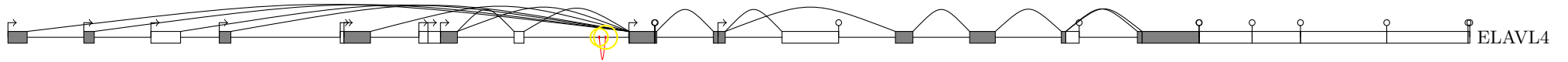
H. Sap	acatgatg	gtaaagaatcctt...2750...atTTTAattataaattTGGCt	TAAGT	TACA	tttctgagagtgattgtgta...265...ttttatTTTtat	ttagataa
R. Mac	acatgatg	gtaaagaatcctt...2765...atTTTAattataaattTGGCt	TAAGT	TACA	tttctgagagttagttgtgta...266...ttttatTTTtat	ttagataa
P. Tro	acatgatg	gtaaagaatcctt...2641...atTTTAattataaattTGGCt	TAAGT	TACA	tttctgagagtgattgtgta...265...ttttatTTTtat	ttagataa
P. Abe	acatgatg	gtaaagaatcctt...2751...atTTTAattataaattTGGCt	TAAGT	TACA	tttctgagagttagttgtgta...265...ttttatTTTtat	ttagataa
C. Jac	acatgatg	gtaaagaatcctt...2688...atTTTAattataaattTGGCt	TAAGT	TACA	tttctgagagtgattgtgta...262...ttttatTTTtat	ttagataa
M. Mus	acacgatg	gtaaagaactt...3563...atTTTAattataaattTGGCt	TAAGT	TACA	tttctgagagtgattgtgta...251...actTTTtttat	ttagataa
R. Nor	ccgtgatg	gtaaagaactg...2882...atTTTAattataaattTGGCt	TAAGT	TACA	tttctgagagtgattgtgta...251...tattgtTTTtat	ttagataa
C. Por	acatgatg	gtaaagaactg...2653...atTTTAattataaattTGGCt	TAAGT	TACA	tttctgagagtgattgtgta...264...tatcTTTttat	ttagataa
O. Cun	acatgatg	attaagaatcat...3293...atTTTAattataaattTGGCt	TAAGT	TACA	tttctgagagtgattgtgta...268...tatcattTTTcc	ttagataa
C. Fam	acatgatg	gtaaagaatcctt...2557...atTTTAattataaattTGGCt	TAAGT	TACA	tttctgagagtgattgtgta...274...ttttatTTTtat	ttagataa
B. Tau	acgtgatg	gcaaagaatcctt...2584...atTTTAattataaattTGGCt	TAAGT	TACA	tttctgagagttagttgtgta...264...ttttatTTTtat	ttagataa
E. Cab	acatgatg	gtaaagaatcctt...2443...atTTTAattataaattTGGCt	TAAGT	TACA	tttctgagagtgattgtgta...271...tcttattTTTgt	ttagataa
L. Afr	acatgatg	gtaaagaatcctt...2752...atTTTAattataaattTGGCt	TAAGT	TACA	tttctgagagtgattgtata...273...ttttatTTTtat	ttagataa
		* ** *	*****	*****	*****	*****

id=761783 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50607531_50610624_1 type=IN

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R. Mac	attaaaaa	gattaatTTTcc...394...tgggTtaatttattataagt	TGTA	ACTTGGCTA	gttttgtttgtatatgtcct...286...aaaaaaatacaa	gggttcat
P. Tro	attaaaaa	gattaatTTTcc...394...tgggTtaatttattataagt	TGTA	ACTTGGCTA	gttttgtttgtatatgtcct...287...aaaaaaatacaa	gggttcat
P. Abe	attaaaaa	gattaatTTTcc...394...tgggTtaatttattataagt	TGTA	ACTTGGCTA	gttttgtttgtatatgtcct...287...aaaaaaatacaa	gggttcat
C. Jac	attaaaaa	gattaatTTTcc...396...tgggTtaatttattataagt	TGTA	ACTTGGCTA	gttttgtttgtatatgtcct...287...aaaaaaatacaa	gggttcat
M. Mus	attaaaaa	gattcattTTcc...398...tgggTtaatttattataagt	TGTA	ACTTGGCTA	gttttgtttgtatatgtcct...292...aaaaaaatacaa	gagttcat
R. Nor	attaaaaa	gattcattTTcc...392...tgggTtaatttattataagt	TGTA	ACTTGGCTA	gttttgtttgtatatgtcct...293...aaaaaatccaa	gagttcat
C. Por	attaaaat	gattaatTTTct...394...tgagTtaatttattataagt	TGTA	ACTTGGCTA	gttttgtttgtatatgtcct...286...aaaaaaatacaa	gagttcat
O. Cun	attaaaaa	gattaatTTTcc...394...tgggTtaatttattataagt	TGTA	ACTTGGCTA	gttttgtttgtatatgtcct...290...aaaaaaataaaa	gagttcat
C. Fam	attaaaaa	gattaatTTTcc...394...tgggTtaatttattataagt	TGTA	ACTTGGCTA	gttttgtttgtatatgtcct...287...aaaaaaatacaa	gggttcat
B. Tau	attaaaaa	gattaatTTTcc...394...tgggTtaatttattataagt	TGTA	ACTTGGCTA	gttttgtttgtatatgtcct...288...aaaaaaatacaa	gggttcat
E. Cab	attaaaaa	gattaatTTTcc...392...tgggTtaatttattataagt	TGTA	ACTTGGCTA	gtttcgtttgtatatgtcct...286...aaaaaaatacaa	ggattcct
L. Afr	gttaaaaa	gattaatTTTcc...399...tgggTtaatttattataagt	TGTA	ACTTGGCTA	gttttgtttgtatatgtcct...294...aaaaaaatacaa	gggttcat
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id=761806 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50667967_50668726_1 type=E3 VIEW

Figure 448:



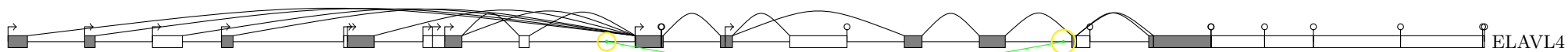
H.Sap	acatgatg	gtaaagaatcct...2786...	ttctgagagtgattgtgtaa	TGAAaACAGGaATTAG	ccttttcattaacaaaataat...228...	ttttatttttat	ttagataa
R.Mac	acatgatg	gtaaagaatcct...2801...	ttctgagagtattgtgtaa	TGAAaACAGGaATTAG	ccttttcattaacaaaataat...229...	ttttatttttat	ttagataa
P.Abe	acatgatg	gtaaagaatcct...2787...	ttctgagagtattgtgtaa	TGAAaACAGGaATTAG	ccttttcattaacaaaataat...228...	ttttatttttat	ttagataa
C.Jac	acatgatg	gtaaagaatcct...2724...	ttctgagagtattgtgtaa	TGAAaACAGGaATTAG	ccttttcattaacaaaataat...225...	ttttatttttat	ttagataa
M.Mus	acacgatg	gtaaagaaact...3599...	ttctgagagtattgtgtaa	TGAAaACAGGaATTAG	ccttttcattaacaaaataat...214...	acttttttttat	ttagataa
R.Nor	ccgtgatg	gtaaagaaactg...2918...	ttctgagagtattgtgtaa	TGAAaACAGGaATTAG	ccttttcattaacaaaataat...214...	ttattgttttat	ttagataa
C.Por	acatgatg	gtaaagaacctg...2689...	ttctgagagtattgtgtaa	TGAAaACAGGaATTAG	ccttttcattaacaaaataat...227...	tatctttttat	ttagataa
O.Cun	acatgatg	attaagaatcat...3329...	ttctgagagtattgtgtaa	TGAAaACAGGaATTAG	ccttttcattaacaaaataat...231...	tatcatttttcc	ttagataa
C.Fam	acatgatg	gtaaagaatcct...2593...	ttctgagagtattgtgtaa	TGAAaACAGGaATTAG	ccttttcattaacaaaataat...237...	ttttatttttat	ttagataa
F.Cat	ttataatg	ataaagaatcct...3095...	ttctgagagtattgtgtaa	TGAAaACAGGaATTAG	ccttttcattaacaaaataat...238...	ttttatttttat	ttagataa
B.Tau	acgtgatg	gcaaagaatcct...2620...	ttctgagagtattgtgtaa	TGAAaACAGGaATTAG	ccttttcattaacaaaataat...227...	ttttatttttat	ttagataa
O.Avi	acatgatg	gcaaagaatcct...2622...	ttctgagagtattgtgtaa	TGAAaACAGGaATTAG	ccttttcattaacaaaataat...227...	ttttatttttat	ttagataa
L.Afr	acatgatg	gtaaagaatcct...2788...	ttctgagagtattgtataa	TGAAaACAGGaATTAG	ccttttcattaacaaaataat...236...	ttttatttttat	ttagataa
		***	***** *	*****	**** *****	***	*****

id=761783 gene=ENSG00000162374 name=ELAVL4 segment=chr1_50607531_50610624_1 type=IN

H.Sap	acatgatg	gtaaagaatcct...2842...	gggagagttcctactgcatt	CTAGTCTGTgTTCA	aaatctatgggctggcctaa...174...	ttttatttttat	ttagataa
R.Mac	acatgatg	gtaaagaatcct...2857...	gggagagttcctactgcatt	CTAGTCTGTgTTCA	aaatctatgggctggcctaa...175...	ttttatttttat	ttagataa
P.Abe	acatgatg	gtaaagaatcct...2843...	gggagagttcctactgcatt	CTAGTCTGTgTTCA	aaatctatgggctggcctaa...174...	ttttatttttat	ttagataa
C.Jac	acatgatg	gtaaagaatcct...2780...	gggagagttcctactgcatt	CTAGTCTGTgTTCA	aaatctatgggctggcctaa...171...	ttttatttttat	ttagataa
M.Mus	acacgatg	gtaaagaaact...3655...	gggagattcccactgcatt	CTAGTCTGTgTTCA	aaatcaaggggctggcctaa...160...	acttttttttat	ttagataa
R.Nor	ccgtgatg	gtaaagaaactg...2974...	gggagattcccactgcatt	CTAGTCTGTgTTCA	aaatcaaggggctggcctaa...160...	ttattgttttat	ttagataa
C.Por	acatgatg	gtaaagaacctg...2745...	gggagagtttcccactgcatt	CTAGTCTGTgTTCA	aaatctaaaggcggcctaa...173...	tatctttttat	ttagataa
O.Cun	acatgatg	attaagaatcat...3385...	gggagagttcccactgcatt	CTAGTCTGTgTTCA	gaatctatgggctggcctaa...177...	tatcatttttcc	ttagataa
C.Fam	acatgatg	gtaaagaatcct...2649...	gggagagttcccactgcatt	CTAGTCTGTgTTCA	aaatctatgggctggcctaa...183...	ttttatttttat	ttagataa
F.Cat	ttataatg	ataaagaatcct...3151...	gggagcgttcccattgcatt	CTAGTCTGTgTTCA	aaatctatgggctggcctaa...184...	ttttatttttat	ttagataa
B.Tau	acgtgatg	gcaaagaatcct...2676...	gggagagttcccactgcatt	CTAGTCTGTgTTCA	aaatctatgggctggcctaa...173...	ttttatttttat	ttagataa
O.Avi	acatgatg	gcaaagaatcct...2678...	gggagagttcccactgcatt	CTAGTCTGTgTTCA	aaatctatgggctggcctaa...173...	ttttatttttat	ttagataa
L.Afr	acatgatg	gtaaagaatcct...2844...	gggagagttcccactgcatt	CTAGTCTGTgTTCA	gaatctatgggctggcctaa...182...	ttttatttttat	ttagataa
		***	***** *	***** ** * *	***** * ** * *	***	*****

id=761783 gene=ENSG00000162374 name=ELAVL4 segment=chr1_50607531_50610624_1 type=IN VIEW

Figure 449:



H.Sap	acatgatg	gtaaagaatcctt...2793...	agtgattgtgtaatgaaac	AGGAAT	taGCTT	ttCATT	aaCAAA	ataatgggagagttcctact...	.213...	ttttat	ttttat	ttagataa
R.Mac	acatgatg	gtaaagaatcctt...2808...	agtagttgtgtaatgaaac	AGGAAT	taGCTT	ttCATT	aaCAAA	ataatgggagagttcctact...	.214...	ttttat	ttttat	ttagataa
P.Tro	acatgatg	gtaaagaatcctt...2684...	agtgattgtgtaatgaaac	AGGAAT	taGCTT	ttCATT	aaCAAA	ataatgggagagttcctact...	.213...	ttttat	ttttat	ttagataa
P.Abe	acatgatg	gtaaagaatcctt...2794...	agtgattgtgtaatgaaac	AGGAAT	taGCTT	ttCATT	aaCAAA	ataatgggagagttcctact...	.213...	ttttat	ttttat	ttagataa
C.Jac	acatgatg	gtaaagaatcctt...2731...	agtgattgtgtaatgaaac	AGGAAT	taGCTT	ttCATT	aaCAAA	ataatgggagagttcctact...	.210...	ttttat	ttttat	ttagataa
M.Mus	acacgatg	gtaaagaaactt...3606...	agtgattgtgtaatgaaac	AGGAAT	taGCTT	ttCATT	aaCAAA	ataatgggagagttccact...	.199...	actttt	ttttat	ttagataa
R.Nor	cogtgatg	gtaaagaaactg...2925...	agtgattgtgtaatgaaac	AGGAAT	taGCTT	ttCATT	aaCAAA	ataatgggagagttccact...	.199...	ttattg	ttttat	ttagataa
C.Por	acatgatg	gtaaagaacctg...2696...	agtgattgtgtaatgaaac	AGGAAT	taGCTT	ttCATT	aaCAAA	ataatgggagagttccact...	.212...	tatctt	ttttat	ttagataa
O.Cun	acatgatg	attaagaatcat...3336...	agtgattgtgtaatgaaac	AGGAAT	taGCTT	ttCATT	aaCAAA	ataatgggagagttccact...	.216...	tatcatt	ttttcc	ttagataa
C.Fam	acatgatg	gtaaagaatcctt...2600...	agtgattgtgtaatgaaac	AGGAAT	taGCTT	ttCATT	aaCAAA	ataatgggagagttccact...	.222...	ttttat	ttttat	ttagataa
F.Cat	ttataatg	ataaagaatcctt...3102...	agtgattgtgtaatgaaac	AGGAAT	taGCTT	ttCATT	aaCAAA	ataatgggagagttccact...	.223...	ttttat	ttttat	ttagataa
B.Tau	acgtgatg	gcaaagaatcctt...2627...	agtgattgtgtaatgaaac	AGGAAT	taGCTT	ttCATT	aaCAAA	ataatgggagagttccact...	.212...	ttttat	ttttat	ttagataa
E.Cab	acatgacg	gtaaagaatcctt...2486...	agtgattgtgtaatgaaac	AGGAAT	taGCTT	ttCATT	aaCAAA	ataatgggagagttccact...	.219...	tctatt	ttttgt	ttagataa
L.Afr	acatgatg	gtaaagaatcctt...2795...	agtgattgtataatgaaac	AGGAAT	taGCTT	ttCATT	aaCAAA	ataatgggagagttccact...	.221...	ttttat	ttttat	ttagataa

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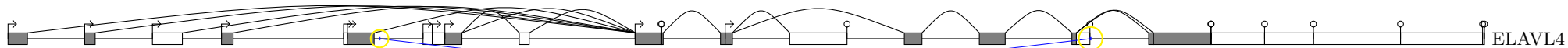
id=761783 gene=ENSG0000162374 name=ELAVL4 segment=chr1.50607531_50610624_1 type=IN

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R.Mac	aggttcag	gtaggcatgcc...1519...	aagttgtgagcttttcttc	TTTG	aaAATGGAGCATTCTT	attaatagttccattgagcg...	.38...	ttctct	tttgag	gctggaca
P.Tro	aggttcag	gtaggcatgcc...1509...	aagttgtgagcttttcttc	TTTG	aaAATGGAGCATTCTT	attaatagttccattgagcg...	.38...	ttctct	tttgag	gctggaca
P.Abe	aggttcag	gtaggcatgcc...1522...	aagttgtgagcttttcttc	TTTG	aaAATGGAGCATTCTT	attaatagttccattgagcg...	.38...	ttctct	tttgag	gctggaca
C.Jac	aggttcag	gtaggcatgcc...1507...	aagttgtgagcttttcttc	TTTG	aaAATGGAGCATTCTT	attaatagttccattgagcg...	.38...	ttctct	tttgag	gctggaca
M.Mus	agattcag	gtaggcatgcc...1525...	aagttgtcaagcttttcttc	TTTG	aaAATGGAGCATTCTT	attaatagttccattgagtg...	.38...	ttctct	tttgag	gctggaca
R.Nor	agattcag	gtaggcacctgc...1498...	aagttgtcgagcttttcttc	TTTG	aaAATGGAGCATTCTT	attaatagttccattgagtg...	.38...	ttctct	tttgag	gctggaca
C.Por	aggttcag	gtaggcctgcc...1439...	aagttgtgagcttttcttc	TTTG	aaAATGGAGCATTCTT	attaatagttccattgagcg...	.38...	ttctct	tttgag	gctggaca
O.Cun	aggttcag	gtaggcatgcc...1519...	aagttgtgagcttttcttc	TTTG	aaAATGGAGCATTCTT	attaatagttccattgagcg...	.38...	ttctct	tttgag	gctggaca
C.Fam	aggttcag	gtaggcacagcc...1505...	aagttattgagcttttcttc	TTTG	aaAATGGAGCATTCTT	attaatagttccattgagcg...	.38...	ttctct	tttgag	gctggaca
F.Cat	agattcag	gtaggcacaccc...2322...	aagttgtcgagcttttcttc	TTTG	aaAATGGAGCATTCTT	attaatagttccattgagcg...	.38...	ttctct	tttgag	gctggaca
B.Tau	aggttcag	gtagggtgaccc...1480...	aagttttgagcttttcttc	TTTG	aaAATGGAGCATTCTT	attaatagttccattgagcg...	.38...	ttctct	tttgag	gctggaca
E.Cab	aggttcag	gtaggcatgcc...1485...	aagttgtgagcttttcttc	TTTG	aaAATGGAGCATTCTT	attaatagttccattgagcg...	.38...	ttctct	tttgag	gctggaca
L.Afr	aggttcag	gtagggtatgcc...1731...	aagttgtggagcttttcttc	TTTG	aaAATGGAGCATTCTT	attaatagttccattgagcg...	.38...	ttctct	tttgag	gctggaca

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id=761797 gene=ENSG0000162374 name=ELAVL4 segment=chr1.50661459_50663100_1 type=IN VIEW

Figure 450: CS=4.2



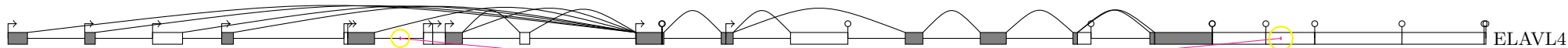
H.Sap	tggttatg	gtaggtatgactagatttataatctgttgtt	TGTGTTGc	TGGAgGGAAGaAAAG	----	catctacaccttgaccagtc...	341...	gtgctggaaatt	taaacctc	
R.Mac	tggttatg	gtaggtatgactagatttataatctgttgtt	TGTGTTGc	TGGAgGGAAGaAAAG	----	catctacaccttgaccagtc...	340...	gtgctggaaatc	taaacctc	
P.Tro	tggttatg	gtaggtatgactagatttataatctgttgtt	TGTGTTGc	TGGAgGGAAGaAAAG	----	catctacaccttgaccagtc...	341...	gtgctggaaatt	taaacctc	
P.Abe	tggttatg	gtaggtatgactagatttataatctgttgtt	TGTGTTGc	TGGAgGGAAGaAAAG	----	catctacaccttgaccagtc...	341...	gtgctggaaatt	taaacctc	
C.Jac	tggttatg	gtaggtatgactagatttataatctgttgtt	TGTGTTGc	TGGAgGGAAGaAAAG	----	catctacaccttgaccagtc...	340...	gtactggaaatt	taaacctc	
R.Nor	tggttatg	gtaggtataactagatatataatctgttgtt	CGTGTTGc	TGGAGGGAAGGAAGG	caagcgtctactccttgcc	----	342...	gtgctggaaatg	taaacctg	
C.Por	tggttatg	gtaggtatgactagatttataatctgttgtt	TGTGTTGc	TGGAGGGAAGa	----	caagcatctacaccttgacc	----	338...	gtgctggagatt	taaacctc
O.Cun	tggttatg	gtaggtatgactagatttataatctgttgtt	TGTGTTGc	TGGAgGGAAGaAAAG	----	catccacaccttgaccaatc...	340...	gtgctggaaatt	taaacctt	
C.Fam	tggttatg	gtaggtatgactagatttataatctgttgtt	TGTGTTGc	TGGAgGGAAGaAAAG	----	catctacaccttgaccagtc...	353...	atgctggaaatg	taaagctt	
F.Cat	tggttatg	gtaggtatgactagatttataatctgttgtt	TGTGTTGc	TGGAGGGAAGa	----	aaacatctacaccttgcc	----	365...	gtgctggaaatt	taagctc
B.Tau	tggttatg	gtaggtatgactagatttataatctgttgtt	TGTGTTGc	TGGAgGGAAGaAAAG	----	catctccaccttgaccagtc...	345...	gagctggaaatt	taaacctt	
E.Cab	tggttatg	gtaggtacgactagatttataatctgttgtt	TGTGTTGc	TGGAGGGAAGAGAAG	----	catctacaccttgaccagtc...	350...	gtgctggaaatt	taaacctc	
L.Afr	tggttatg	gtaggtatgactagatttataatcgttgtt	TGTGTTGc	TGGAgGGAAGaAAAG	----	catctacaccttgaccagtc...	334...	atgctggaaatt	taaacctc	
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	

id=761777 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50574871.50575297_1 type=IN

H.Sap	gtaaagag	gtaattaaaact...74...----	ttaaagaaaaaattcttc-	CTTTTCTTCCA	cCAGCATg
R.Mac	gtaaagag	gtaattaaaact...81...----	aaaaaaaaaaaaaattcctc-	CTTTTCTTCCA	cCAGCATg
P.Tro	gtaaagag	gtaattaaaact...74...----	cttaaaaaaaaaaattcttc-	CTTTTCTTCCA	cCAGCATg
P.Abe	gtaaagag	gtaattaaaact...81...----	aaaaaaaaaaaaaattcttc-	CTTTTCTTCCA	cCAGCATg
C.Jac	gtaaagag	gtaattaaaact...70...----	ttacttttaaaaaatcttc-	CTTTTCTTCCA	cCAGCATg
R.Nor	gtaaagag	gtaattaaaact...66...----	ttacttattttttcctaatt	TTTTTCTTCCA	cCAGCATg
C.Por	gtaaagag	gtaattaaaact...69...----	ctgttttttttaattcttc-	TTTTTCTTCCA	cCAGCATg
O.Cun	gtaaagag	gtaattaaaact...68...----	acttttttttaaaattcttc-	CTTTTCTTCCA	cCAGCATg
C.Fam	gtaaagag	gtaattaaaact...76...----	tttttttttttaattcttc-	TTTTTCTTCCA	cCAGCATg
F.Cat	gtaaagag	gtaattaaaact...77...----	tttttttttttaattcttc-	TTTTTCTTCCA	cCAGCATg
B.Tau	gtaaagag	gtaattaaaact...78...----	tttttttttttaattcttc-	CTTTTCTTCCA	cCAGCATg
E.Cab	gtaaagag	gtaattaaaact...70...act	tttttttttttaatt-CTTC	TTTTTCTTCCA	cCAGCATg
L.Afr	gtaaagag	gtaattaaaact...75...----	tttttttttttaattcttc-	CTTTTCTTCCA	cCAGCATg
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id=761799 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50663140.50663257_1 type=AN VIEW

Figure 451:



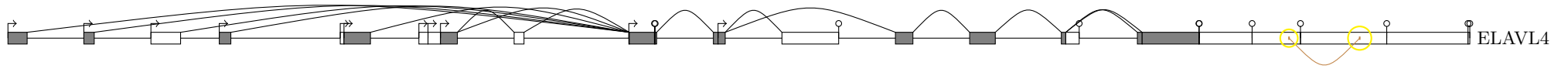
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R. Mac	tggttatg	gtaggtatgact...169...atataagattgtcattttta	ACAAGtc	GTTGTCAGTTTTCCCT	-----tcaacataaaggcaaggggt-...170...gtgctggaatc	taaacctc
P. Tro	tggttatg	gtaggtatgact...169...atataagattgtcattttta	GCAAGtc	GTTGTCAGTTTTCCCT	-----tcaacataaaggcaaggggt-...171...gtgctggaatt	taaacctc
P. Abe	tggttatg	gtaggtatgact...169...atataagattgtcattttta	ACAAGtc	GTTGTCAGTTTTCCCT	-----tcaacataaaggcaaggggt-...171...gtgctggaatt	taaacctc
C. Jac	tggttatg	gtaggtatgact...169...atataagattgtcattttta	ACAAGtc	GTTGTCAGTTTTCCCT	-----tcaacataaaggcaaggggt-...170...gtactggaatt	taaacctc
M. Mus	tggttatg	gtaggtatgcct...167...gagagagattgtcattttta	ACAGGtc	GTTGTCAGTTTTCCCT	-----tccacataaaagcaggagggt-...173...ctggtggaatg	taaacctc
R. Nor	tggttatg	gtaggtataact...171...gagagagattgtcattttta	ACAGGtc	GTTGTCAGTTTTCCCT	-----tccacataaaagcaggagggt-...170...gtgctggaatg	taaacctg
C. Por	tggttatg	gtaggtatgact...171...-----agtgtcatttttaacagctc	GTTGTCAGTTTTCCCT	-----tcaacataaagcaggagggt-...169...gtgctggagatt	taaacctc	
O. Cun	tggttatg	gtaggtatgact...169...gagatagattgtcattttta	ACAGGtc	GTTGTCAGTTTTCCCT	-----tcaacataaagggtgtggggg-...170...gtgctggaatt	taaacctt
C. Fam	tggttatg	gtaggtatgact...176...-----ttgtcatttttaacaggtca	TTGTCAGTTTTCCCT	-----tcaacataaaggagggggct-...184...atgctggaatg	taaacctt	
B. Tau	tggttatg	gtaggtatgact...176...-----ttttcatttttaacaggtca	TTGTCAGTTTTCCCT	-----tcaacataaagggtgggggtg-...176...gagctggaatt	taaacctt	
E. Cab	tggttatg	gtaggtacgact...176...-----ttgtcatttttaacaggtca	TTGTCAGTTTTCCCT	-----tcaacataaagcagagagga-...181...gtgctggaatt	taaacctc	
L. Afr	tggttatg	gtaggtatgact...175...-----actgtcatttttaaaaggtc	GTTGTCAA	TTTCCCT	CTAAATaaaggcaaggggggtgggc...158...atgctggaatt	taaacctc
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id=761777 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50574871.50575297.1 type=IN

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R. Mac	ttgttgcc	aaagaggtggtc...85...----atattttgactggctaattt	AGGGGAAATTGACAAC	TTTGT	cgcgttcatactgcactggt...256...aaaaattaaaaa	gattaatt
P. Tro	ttgttgcc	aaagaggtggtc...85...----atattttgactggctaattt	AGGGGAAATTGACAAC	TTTGT	cgcgttcatactgcactggt...256...aaaaattaaaaa	gattaatt
P. Abe	ttgttgcc	aaagaggtggtc...85...----atattttgactggctaattt	AGGGGAAATTGACAAC	TTTGT	cgcgttcatactgcactggt...253...aaaaattaaaaa	gattaatt
C. Jac	ttgttgcc	aaagaggtggtc...85...----atattttgactggctaattt	AGGGGAAATTGACAAC	TTTGT	cgcgttcatactgcactggt...256...aaaaattaaaaa	gattaatt
M. Mus	ttgttgcc	aaagaggtggtc...84...----atattttgactggctaattt	AGGGGAAATTGACAAC	TTTGT	cgcgttcatactgcactggt...251...aaaaattaaaaa	gattcatt
R. Nor	ttgttgcc	aaagaggtggtc...84...----atattttgactggctaattt	AGGGGAAATTGACAAC	TTTGT	cgcgttcatactgcactggt...251...aaaaattaaaaa	gattcatt
C. Por	ttgttgcc	aaagaggtggtc...85...----atattttgactggctaattt	AGGGGAAATTGACAAC	TTTGT	cgcgttcatactgcactgca-----...256...aaaaattaaaat	gattaatt
O. Cun	ttgttgcc	aaagaggtggtc...85...----atattttgactggctaattt	AGGGGAAATTGACAAC	TTTGT	cacgttcatactgcactggt...258...aaaaattaaaaa	gattaatt
C. Fam	ttgttgcc	aaagaggtggtc...85...----atattttgactggctaattt	AGGGGAAATTGACAAC	TTTGT	cacgttcatactgcactgca-----...261...aaaaattaaaaa	gattaatt
B. Tau	ttgttgcc	aaagaggtggtc...85...----atattttgactggctaattt	AGGGGAAATTGACAAC	TTTGT	cgcgttcatactgcactgca-----...260...aaaaattaaaaa	gattaatt
E. Cab	ttgttgcc	aaagaggtggtc...85...----atattttgactggctaattt	AGGGGAAATTGACAAC	TTTGT	cgcgttcatactgcactgca-----...259...aaaaattaaaaa	gattaatt
L. Afr	ttgttgcc	aaagaggtggtc...83...aaaaatattttgactggcta	ATTAGGGGAAATTGACAAC	TTTGT	cacgttcatactgcactgca-----...266...aaaagttaaaaa	gattaatt
	*****	*****		*****	*****	**** **

id=761805 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50667541.50667966.1 type=E3 VIEW

Figure 452:



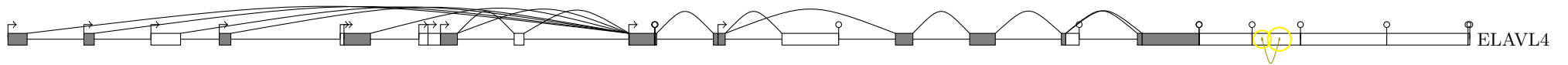
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R. Mac	ttgttgcc	aaagaggtggtc...276..actaggggaaggagtggtc	GTTCTAC	CAGG	TACC	acagttccccacagtcaaaa...69...aaaaattaataaaa	gattaatt
P. Tro	ttgttgcc	aaagaggtggtc...276..actaggggaaggagtggtc	GTTCTAC	CAGG	TACC	acagttccccacagtcaaaa...69...aaaaattaataaaa	gattaatt
P. Abe	ttgttgcc	aaagaggtggtc...273..actaggggaaggagtggtc	GTTCTAC	CAGG	TACC	acagttccccacagtcaaaa...69...aaaaattaataaaa	gattaatt
C. Jac	ttgttgcc	aaagaggtggtc...276..actaggggaaggagtggtc	GTTCTAC	CAGG	TACC	acagttccccacagtcaaaa...69...aaaaattaataaaa	gattaatt
M. Mus	ttgttgcc	aaagaggtggtc...270..gctaggggaaggagtggtc	GTTCTAC	CAGG	TACC	acagttccccacagtcaaaa...69...aaaaattaataaaa	gattcatt
R. Nor	ttgttgcc	aaagaggtggtc...270..gctaggggaaggagtggtc	GTTCTAC	CAGG	TACC	acagttccccacagtcaaaa...69...aaaaattaataaaa	gattcatt
C. Por	ttgttgcc	aaagaggtggtc...271..actaggggaaggagtggtc	GTTCTAC	CAGG	TACC	acagttccccacagtcaaaa...69...aaaaattaataaaa	gattaatt
O. Cun	ttgttgcc	aaagaggtggtc...279..-ctaggggaaggagtggtc	GTTCTAC	CAGG	TACC	acagttccccacagtcaaaa...69...aaaaattaataaaa	gattaatt
C. Fam	ttgttgcc	aaagaggtggtc...275..actaggggaaggagtggtc	GTTCTAC	CAGG	TACC	acagttccccacagtcaaaa...69...aaaaattaataaaa	gattaatt
B. Tau	ttgttgcc	aaagaggtggtc...274..actaggggaaggagtggtc	GTTCTAC	CAGG	TACC	acagttccccacagtcaaaa...69...aaaaattaataaaa	gattaatt
E. Cab	ttgttgcc	aaagaggtggtc...273..actaggggaaggagtggtc	GTTCTAC	CAGG	TACC	acagttccccacagtcaaaa...69...aaaaattaataaaa	gattaatt
L. Afr	ttgttgcc	aaagaggtggtc...282..actaggggaaggagtggtc	GTTCTAC	CAGG	TACC	acagttccccacagtcaaaa...70...aaagttaataaaa	gattaatt
*****	*****	*****	*****	*****	*****	*****	*****

id=761805 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50667541.50667966.1 type=E3

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R. Mac	attataaaa	gattaattttcc...475..gacagttaaagaggtatcaa	GGTA	CTTG	GTAGAAC	tattctttgatattgtca...203...aaaaaatacaaa	gggttcat
P. Tro	attataaaa	gattaattttcc...475..gacagttaaagaggtatcaa	GGTA	CTTG	GTAGAAC	tattctttgatattgtca...204...aaaaaatacaaa	gggttcat
P. Abe	attataaaa	gattaattttcc...475..gacagttaaagaggtatcaa	GGTA	CTTG	GTAGAAC	tattctttgatattgtca...204...aaaaaatacaaa	gggttcat
C. Jac	attataaaa	gattaattttcc...477..gacagttaaagaggtatcaa	GGTA	CTTG	GTAGAAC	tattctttgatattgtca...204...aaaaaatacaaa	gggttcat
M. Mus	attataaaa	gattcattttcc...479..gacagttaaagaggtatcaa	GGTA	CTTG	GTAGAAC	tattctttgatattgtca...209...aaaaaatacaaa	gagttcat
R. Nor	attataaaa	gattcattttcc...473..gacagttaaagaggtatcaa	GGTA	CTTG	GTAGAAC	tattctttgatattgtca...210...aaaaaatccaa	gagttcat
C. Por	attataaaa	gattaattttct...475..gacagttaaagaaggtatcga	GGTA	CTTG	GTAGAAC	tattctttgatattgtca...203...aaaaaatacaaa	gagttcat
O. Cun	attataaaa	gattaattttcc...475..gacagttaaagaggtatcaa	GGTA	CTTG	GTAGAAC	tattctttgatattgtc...208...aaaaaatacaaa	gagttcat
C. Fam	attataaaa	gattaattttcc...475..gacagttaaagaggtatcaa	GGTA	CTTG	GTAGAAC	tattctttgatattgtca...204...aaaaaatacaaa	gggttcat
B. Tau	attataaaa	gattaattttcc...475..gacagttaaagaggtatcaa	GGTA	CTTG	GTAGAAC	tattctttgatattgtca...205...aaaaaatacaaa	gggttcat
E. Cab	attataaaa	gattaattttcc...473..gacagttcaagaggtatcaa	GGTA	CTTG	GTAGAAC	tattctttgatattgtca...203...aaaaaatacaaa	gagttcat
L. Afr	gtaaaaaa	gattaattttcc...480..gaccgttcaagaggtatcaa	GGTA	CTTG	GTAGAAC	tattctttgatattgtca...211...aaaaaatacaaa	gggttcat
*****	*****	*****	*****	*****	*****	*****	*****

id=761806 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50667967.50668726.1 type=E3 VIEW

Figure 453:



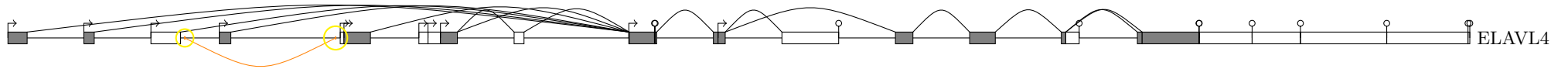
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R.Mac	ttgttgcc	aaagaggtggtc...40...aaaatataaagaatttttacAAGAggaATCTGgaTTG	--agaaaaaatattttgactg...305...aaaattaaaaa	gattaatt
P.Tro	ttgttgcc	aaagaggtggtc...40...aaaatataaagaatttttacAAGAggaATCTGgaTTG	--agaaaaaatattttgactg...305...aaaattaaaaa	gattaatt
P.Abe	ttgttgcc	aaagaggtggtc...40...aaaatataaagaatttttacAAGAggaATCTGgaTTG	--agaaaaaatattttgactg...302...aaaattaaaaa	gattaatt
C.Jac	ttgttgcc	aaagaggtggtc...40...aaaatataaagaatttttacAAGAggaATCTGgaTTG	--agaaaaaatattttgactg...305...aaaattaaaaa	gattaatt
M.Mus	ttgttgcc	aaagaggtggtc...40...aaaatataaagaatttttacAAGAggaATCTGgaTTG	--agaaa-aaatattttgactgg...299...aaaattaaaaa	gattcatt
R.Nor	ttgttgcc	aaagaggtggtc...40...aaaatataaagaatttttacAAGAggaATCTGgaTTG	--agaaa-aaatattttgactgg...299...aaaattaaaaa	gattcatt
C.Por	ttgttgcc	aaagaggtggtc...40...aaaatataaagaatttttacAAGAggaATCTGgaTTG	--agaaaaaatattttgactg...300...aaaattaaaat	gattaatt
O.Cun	ttgttgcc	aaagaggtggtc...40...aaaatataaagaatttttacAAGAggaATCTGgaTTG	--agaaaaaatattttgactg...307...aaaattaaaaa	gattaatt
C.Fam	ttgttgcc	aaagaggtggtc...40...aaaatataaagaatttttacAAGAggaATCTGgaTTG	--agaaaaaatattttgactg...304...aaaattaaaaa	gattaatt
B.Tau	ttgttgcc	aaagaggtggtc...40...aaaatataaagaatttttacAAGAggaATCTGgaTTG	--agaaaaaatattttgactg...303...aaaattaaaaa	gattaatt
E.Cab	ttgttgcc	aaagaggtggtc...40...aaaatataaagaatttttacAAGAggaATCTGgaTTG	--agaaaaaatattttgactg...302...aaaattaaaaa	gattaatt
L.Afr	ttgttgcc	aaagaggtggtc...40...aaaatataaagaatttttacAAGAggaATCTGgaTTG	agaaaaaatattttgac---...312...aaaagttaaaaa	gattaatt
	*****	*****	*****	*****

id=761805 gene=ENSG00000162374 name=ELAVL4 segment=chr1_50667541.50667966.1 type=E3

H.Sap	ttgttgcc	aaagaggtggtc...193...gttttttgaaggatgggctaTAAACAGATgaTCTT	catatctttcatagcatgt...154...aaaattaaaaa	gattaatt
R.Mac	ttgttgcc	aaagaggtggtc...193...gttttttgaaggatgggctaTAAACAGATgaTCTT	catatctttcatagcatgt...154...aaaattaaaaa	gattaatt
P.Tro	ttgttgcc	aaagaggtggtc...193...gttttttgaaggatgggctaTAAACAGATgaTCTT	catatctttcatagcatgt...154...aaaattaaaaa	gattaatt
P.Abe	ttgttgcc	aaagaggtggtc...193...gttttttgaaggatgggctaTAAACAGATgaTCTT	catatctttcatagcatgt...151...aaaattaaaaa	gattaatt
C.Jac	ttgttgcc	aaagaggtggtc...193...gttttttgaaggatgggctaTAAACAGATgaTCTT	catatctttcatagcatgt...154...aaaattaaaaa	gattaatt
M.Mus	ttgttgcc	aaagaggtggtc...192...gttttttgaaggatgggctaTAAACAGATgaTCTT	catatctttcatagcatgt...149...aaaattaaaaa	gattcatt
R.Nor	ttgttgcc	aaagaggtggtc...192...gttttttgaaggatgggctaTAAACAGATgaTCTT	catatctttcatagcatgt...149...aaaattaaaaa	gattcatt
C.Por	ttgttgcc	aaagaggtggtc...193...gttttttgaaggatgggctaTAAACAGATgaTCTT	catatctttcatagcatgt...149...aaaattaaaat	gattaatt
O.Cun	ttgttgcc	aaagaggtggtc...193...gttttttgaaggatgggctaTAAACAGATgaTCTT	catatctttcatagcatgt...156...aaaattaaaaa	gattaatt
C.Fam	ttgttgcc	aaagaggtggtc...193...gttttttgaaggatgggctaTAAACAGATgaTCTT	catatctttcatagcatgt...153...aaaattaaaaa	gattaatt
B.Tau	ttgttgcc	aaagaggtggtc...193...gttttttgaaggatgggctaTAAACAGATgaTCTT	catatctttcatagcatgt...152...aaaattaaaaa	gattaatt
E.Cab	ttgttgcc	aaagaggtggtc...193...gttttttgaaggatgggctaTAAACAGATgaTCTT	catatctttcatagcatgt...151...aaaattaaaaa	gattaatt
L.Afr	ttgttgcc	aaagaggtggtc...195...gttttttgaaggatgggctaTAAACAGATgaTCTT	catatctttcatagcatgt...159...aaaagttaaaaa	gattaatt
	*****	*****	*****	*****

id=761805 gene=ENSG00000162374 name=ELAVL4 segment=chr1_50667541.50667966.1 type=E3 VIEW

Figure 454:



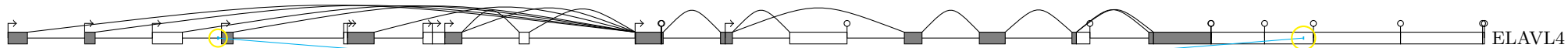
H. Sap	ataatgag	gtaaatat	gtcacttt	ttttct	GGGCag	CATCTGTT	-----	ttt-c	ccccct	cttctttt	---..	272..	ctgagat	atctg	caaccttt
R. Mac	ataatgag	gtaaatat	gtcacttt	ttttct	GGGCag	CATCTGTT	-----	ttcc-	ccccct	cttctttt	---..	273..	ctgagat	atctg	caaccttt
P. Tro	ataatgag	gtaaatat	gtcacttt	ttttct	GGGCag	CATCTGTT	-----	ttt-c	ccccct	cttctttt	---..	273..	ctgagat	atctg	caaccttt
P. Abe	ataatgag	gtaaatat	gtcacttt	ttttct	GGGCag	CATCTGTT	-----	ttcc-	ccccct	cttctttt	---..	273..	ctgagat	atctg	caaccttt
C. Jac	ataatgag	gtaaatat	gtcacttt	ttttct	GGGCag	CATCTGTT	-----	ttcccc	cccccc	accttct	---..	276..	ctgagat	atctg	caaccttt
M. Mus	ataatgag	gtaaatat	gtcacttt	ttttcc	GGGCag	CATCTGTT	-----	tttat	cccccc	catcttc	---..	302..	ctgagat	atctg	cagccttt
R. Nor	ataatgag	gtaaatat	gtcacttt	ttttct	GGGCag	CATCTGTT	-----	tttacc	cccccc	ccccct	---..	307..	cgagct	atctg	cagccttt
C. Por	ataatgag	gtaaatat	gtcacttt	ttttct	GGGCag	CATCTGTT	-----	tttct	ccccct	cttctatt	---..	277..	ctgagat	atctg	caaccttt
O. Cun	ataatgag	gtaaatat	gtcacttt	ttttct	GGGCag	CATCTGTT	-----	tttttt	ttcctc	ccccct	---..	280..	ctgagat	atctg	caaccttt
C. Fam	ataatgag	gtaaatat	gtcacttt	ttttct	GGGCag	CATCTGTT	-----	ttccc-	cccccc	cttcat	---..	305..	ctgacat	gtctg	caaccctt
B. Tau	ataatgag	gtaaatat	gtcacttt	ttttct	GGGCag	CATCTGTT	-----	tttc-	ccccct	cttcat	---..	306..	ctgagat	atctg	caaccttt
E. Cab	ataatgag	gtaaatat	gtcacttt	ttctct	GGGCag	CATCTGTT	-----	ttccc-	ccccct	cttctttt	...305..	ctgagat	atctg	caaccttt	
O. Avi	ataatgag	gtaaatat	gtcacttt	ttttct	GGGCag	CATCTGTT	-----	tttt-	ccccct	cttctatt	---..	307..	ctgagat	atctg	caaccttt
L. Afr	ataatgag	gtaaatat	gtcacttt	ttttct	GGGCag	CATCTGTT	-----	ttgtcc-	cccccc	cttcat	---..	273..	ctgagat	atctg	caaccttt
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

id=761772 gene=ENSG0000162374 name=ELAVL4 segment=chr1.50571623.50571963.1 type=IN

H. Sap	catttatg	gtaagagga	aata...	2453..	atcagat	ccaggctt	cggtc	GACAGATGGTCC	cataaat	ggatg	tataaa	agggga	agcttc	gagcca	atcttc	caaggctc
R. Mac	catttatg	gtaagagga	aata...	2452..	atcagat	ccaggctt	cggtc	GACAGATGGTCC	cataaat	ggatg	tataaa	agggga	agcttc	gagcca	atcttc	caaggctc
P. Tro	catttatg	gtaagagga	aata...	2455..	atcagat	ccaggctt	cggtc	GACAGATGGTCC	cataaat	ggatg	tataaa	agggga	agcttc	gagcca	atcttc	caaggctc
P. Abe	catttatg	gtaagagga	aata...	2451..	atcagat	ccaggctt	cggtc	GACAGATGGTCC	cataaat	ggatg	tataaa	agggga	agcttc	gagcca	atcttc	caaggctc
C. Jac	catttatg	gtaagagga	aata...	2450..	atcagat	ccaggctt	cggtc	GACAGATGGTCC	cataaat	ggatg	tataaa	agggga	agcttc	gagcca	atcttc	caaggctc
M. Mus	catttatg	gtaagagg	gaca...	2560..	atcagag	tctggctt	cggtc	GACAGATGGTCC	cataaat	ggatg	tataaa	agggga	agcttc	gagcca	atcttc	caaggctc
R. Nor	catttatg	gtaagggg	gaca...	2585..	atcagag	tctggctt	cggtc	GACAGATGGTCC	cataaat	ggatg	tataaa	agggga	agcttc	gagcca	atcttc	caaggctc
C. Por	catttatg	gtaagagga	aata...	2383..	atcagat	tctggctt	cggtc	GACAGATGGTCC	cataaat	ggatg	tataaa	agggga	agcttc	gagcca	atcttc	caaggctc
O. Cun	catttatg	gtaagagga	aatg...	2448..	atcagat	cctggctt	cggtc	GACAGATGGTCC	cataaat	ggatg	tataaa	agggga	agcttc	gagcca	atcttc	caaggctc
C. Fam	catttatg	gtaagagg	gatc...	2484..	atcagat	cctggctt	cggtc	GACAGATGGTCC	cataaat	ggatg	tataaa	agggga	agcttc	gagcca	atcttc	caaggctc
B. Tau	catttatg	gtaagaag	gata...	2440..	atcagat	cctggctt	cggtc	GACAGATGGTCC	cataaat	ggatg	tataaa	agggga	agcttc	gagcca	atcttc	caaggctc
E. Cab	catttatg	gtaagagg	gata...	2417..	atcagat	cctggctt	cggtc	GACAGATGGTCC	cataaat	ggatg	tataaa	agggga	agcttc	gagcca	atcttc	caaggctc
O. Avi	catttatg	gtaagaag	gata...	2444..	atcagat	cctggctt	cggtc	GACAGATGGTCC	cataaat	ggatg	tataaa	agggga	agcttc	gagcca	atcttc	caaggctc
L. Afr	catttatg	gtaagagga	aata...	2480..	atcagat	cctggctt	cggtc	GACAGATGGTCC	cataaat	ggatg	tataaa	agggga	agcttc	gagcca	atcttc	caaggctc
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	

id=761774 gene=ENSG0000162374 name=ELAVL4 segment=chr1.50572066.50574604.1 type=IN VIEW

Figure 455:



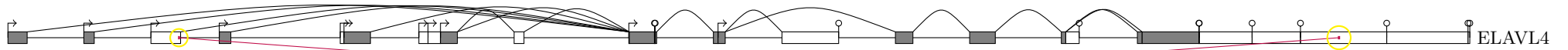
H. Sap	ataatgag	gtaatattttgt...	264...	tggtacagtc	catctggact	CTGTGtGGGAaaGCTG	gctgccggcgactgatgctgagatatctg	caaccttt
R. Mac	ataatgag	gtaatattttgt...	265...	tggtacagtc	catctggact	CTGTGtGGGAaaGCTG	gctgccggcgactgatgctgagatatctg	caaccttt
P. Tro	ataatgag	gtaatattttgt...	265...	tggtacagtc	catctggact	CTGTGtGGGAaaGCTG	gctgccggcgactgatgctgagatatctg	caaccttt
P. Abe	ataatgag	gtaatattttgt...	265...	tggtacagtc	catctggact	CTGTGtGGGAaaGCTG	gctgccggcgactgatgctgagatatctg	caaccttt
C. Jac	ataatgag	gtaatattttgt...	268...	tggtacagtc	catctggact	CTGTGtGGGAaaGCTG	gctgccggcgactgatgctgagatatctg	caaccttt
M. Mus	ataatgag	gtaatattttgt...	295...	tggtacagtc	catctggact	CTGTGtGGGAaaGCTG	gctgccggcgaccga-gctgagatatctg	cagccttt
R. Nor	ataatgag	gtaatattttgt...	300...	tggtacagtc	catctggact	CTGTGtGGGAaaGCTG	gctgccggcgactga-gcggagctatctg	cagccttt
C. Por	ataatgag	gtaatattttgt...	269...	tggtacagtc	catctggact	CTGTGtGGGAaaGCTG	gctgccggcgactgatgctgagatatctg	caaccttt
O. Cun	ataatgag	gtaatattttgt...	272...	tggtacagtc	catctggact	CTGTGtGGGAaaGCTG	gctgccggcgactgatgctgagatatctg	caaccttt
C. Fam	ataatgag	gtaatattttgt...	297...	tggtacagtc	catctggacc	CTGTGtGGGAaaGCTG	gctgccggcgactgatgctgacatgtctg	caacccctt
B. Tau	ataatgag	gtaatattttgt...	298...	tggtacagtc	catctggact	CTGTatGGGAaaGCTGTcTGCC	ggcgactgatgctgagatatctg	caaccttt
E. Cab	ataatgag	gtaatattttgt...	297...	tggtacagtc	catctggact	CTGTGtGGGAaaGCTG	gctgccggcgactgatgctgagatatctg	caaccttt
L. Afr	ataatgag	gtaatattttgt...	265...	tggtacagtc	catctggact	CTGTatGGGAaaGCTG	gctgccggcgactgatgctgagatatctg	caaccttt
*****	*****	*****	*****	*****	*****	*****	*****	*****

id=761772 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50571623_50571963.1 type=IN

H. Sap	ttgttgcc	aaagaggtggtc...	294...	-----tcgttctaccagggtacca	CAGTTCCCCACAG	tcaaaacccaaaagcaagga...	55...aaaaattaataaaa	gattaatt
R. Mac	ttgttgcc	aaagaggtggtc...	294...	-----tcgttctaccagggtacca	CAGTTCCCCACAG	tcaaaacccaaaagcaagga...	55...aaaaattaataaaa	gattaatt
P. Tro	ttgttgcc	aaagaggtggtc...	294...	-----tcgttctaccagggtacca	CAGTTCCCCACAG	tcaaaacccaaaagcaagga...	55...aaaaattaataaaa	gattaatt
P. Abe	ttgttgcc	aaagaggtggtc...	291...	-----tcgttctaccagggtacca	CAGTTCCCCACAG	tcaaaacccaaaagcaagga...	55...aaaaattaataaaa	gattaatt
C. Jac	ttgttgcc	aaagaggtggtc...	294...	-----tcgttctaccagggtacca	CAGTTCCCCACAG	tcaaaacccaaaagcaagga...	55...aaaaattaataaaa	gattaatt
M. Mus	ttgttgcc	aaagaggtggtc...	288...	-----tcgttctaccagggtacca	CAGTTCCCCACAG	tcaaaacccaaaagcaagga...	55...aaaaattaataaaa	gattcatt
R. Nor	ttgttgcc	aaagaggtggtc...	288...	-----tcgttctaccagggtacca	CAGTTCCCCACAG	tcaaaacccaaaagcaagga...	55...aaaaattaataaaa	gattcatt
C. Por	ttgttgcc	aaagaggtggtc...	289...	-----ttgttctaccagggtacca	CAGTTCCCCACAG	tcaaaacccaaaagcaagga...	55...aaaaattaataaaa	gattaatt
O. Cun	ttgttgcc	aaagaggtggtc...	296...	-----tcattctaccagggtacca	CAGTTCCCCACAG	tcaaaacccaaaagcaagga...	55...aaaaattaataaaa	gattaatt
C. Fam	ttgttgcc	aaagaggtggtc...	293...	-----tcgttctaccagggtacca	CAGTTCCCCACAG	tcaaaacccaaaagcaagga...	55...aaaaattaataaaa	gattaatt
B. Tau	ttgttgcc	aaagaggtggtc...	285...	ggagtggttcgttctaccagg	GGTACCACAGTTCCCCACAG	tcaaaacccaaaagcaagga...	55...aaaaattaataaaa	gattaatt
E. Cab	ttgttgcc	aaagaggtggtc...	291...	-----tcgttctaccagggtacca	CAGTTCCCCACAG	tcaaaacccaaaagcaagga...	55...aaaaattaataaaa	gattaatt
L. Afr	ttgttgcc	aaagaggtggtc...	300...	-----tcgttctaccagggtacca	CAGTTCCCCACAG	tcaaaacccaaaagcaagga...	56...aaaagttaataaaa	gattaatt
*****	*****	*****	*****	*****	*****	*****	*****	*****

id=761805 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50667541_50667966.1 type=E3 VIEW

Figure 456:



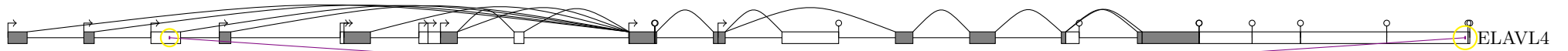
H.Sap	caggctgc	tcttgcaaagag...199..	agatgtttgaatcagcagg	ACGCt	TAATGCTGCTTT	gttaaataatgag	gtaatatt
R.Mac	caggctgc	tcttgcaaagag...199..	agatgtttgaatcagcagg	ACGCt	TAATGCTGCTTT	gttaaataatgag	gtaatatt
P.Tro	caggctgc	tcttgcaaagag...199..	agatgtttgaatcagcagg	ACGCt	TAATGCTGCTTT	gttaaataatgag	gtaatatt
P.Abe	caggctgc	tcttgcaaagag...195..	agatgtttgaatcagcagg	ACGCt	TAATGCTGCTTT	gttaaataatgag	gtaatatt
C.Jac	caggctgc	tcttgcaaagag...199..	agatgtttgaatcagcagg	ACGCt	TAATGCTGCTTT	gttaaataatgag	gtaatatt
M.Mus	caggctgc	tcttgcaaagag...198..	agatgtttgaatcagcagg	ACGCt	TAATGCTGCTTT	gttaaataatgag	gtaatatt
R.Nor	caggctgc	tcttgcaaagag...199..	agatgtttgaatcagcagg	ACGCt	TAATGCTGCTTT	gttaaataatgag	gtaatatt
C.Por	caggctgc	tcttgcaaagag...199..	agatgtttgaatcagcagg	ACGCt	TAATGCTGCTTT	gttaaataatgag	gtaatatt
O.Cun	caggctgc	tcttgcaaagag...199..	agatgtttgaatcagcagg	ACGCt	TAATGCTGCTTT	gttaaataatgag	gtaatatt
C.Fam	caggctgc	tccttcctgcaa...201..	agatgtttgaatcagcagg	ACGCt	TAATGCTGCTTT	gttaaataatgag	gtaatatt
B.Tau	caggctgc	tcttgcaaagag...199..	agatgtttgaatcagcagg	ACGCt	TAATGCTGCTTT	gttaaataatgag	gtaatatt
E.Cab	caggctgc	tcttgcaaagag...199..	agatgtttgaatcagcagg	ACGCt	TAATGCTGCTTT	gttaaataatgag	gtaatatt
L.Afr	caggcggc	tcttgcaaagag...199..	agatgtttgaatcagcagg	ACGCt	TAATGCTGCTTT	gttaaataatgag	gtaatatt
	**** *				*****		*****

id=761771 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50571362_50571622.1 type=AN

H.Sap	attaaaaa	gattaattttcc...290..	tttgtttacttaactatgg	GAAGAAGCATATTA	ttGTGT	cattctggttggtgtgtatg...386..	aaaaaatacaa	gggttcat
R.Mac	attaaaaa	gattaattttcc...290..	tttgtttacttaactatgg	GAAGAAGCATATTA	ttGTGT	cattctggttggtgtgtatg...385..	aaaaaatacaa	gggttcat
P.Tro	attaaaaa	gattaattttcc...290..	tttgtttacttaactatgg	GAAGAAGCATATTA	ttGTGT	cattctggttggtgtgtatg...386..	aaaaaatacaa	gggttcat
P.Abe	attaaaaa	gattaattttcc...290..	tttgtttacttaactatgg	GAAGAAGCATATTA	ttGTGT	cattctggttggtgtgtatg...386..	aaaaaatacaa	gggttcat
C.Jac	attaaaaa	gattaattttcc...291..	tttgtttacttaactatgg	GAAGAAGCATATTA	ttGTGT	cattctggttggtgtgtatg...387..	aaaaaatacaa	gggttcat
M.Mus	attaaaaa	gattcattttcc...293..	tttgtttacttagactttgg	GAAGAAGCATATTA	ctGTGT	ccttctggttggtgtgtatg...392..	aaaaaatacaa	gagttcat
R.Nor	attaaaaa	gattcattttcc...291..	tttgtttacttaactttgg	GAAGAAGCATATTA	ttGTGT	ccttctggttggtgtgtatg...389..	aaaaaatccaa	gagttcat
C.Por	attaaaaa	gattaattttct...290..	tttgtttacttaactatgg	GAAGAAGCATATTA	ttGTGT	cattctggttggtgtgtatg...385..	aaaaaatacaa	gagttcat
O.Cun	attaaaaa	gattaattttcc...290..	tttgtttacttaactatgg	GAAGAAGCATATTA	ttGTGT	cattctggttggtgtgtatg...389..	aaaaaataaaa	gagttcat
C.Fam	attaaaaa	gattaattttcc...290..	tttgtttacttaactatgg	GAAGAAGCATATTA	ttGTGT	cattctggttggtgtgtatg...386..	aaaaaatacaa	gggttcat
B.Tau	attaaaaa	gattaattttcc...290..	tttgtttacttaactatgg	GAAGAAGCATATTA	ttGTGT	cattctggttggtgtgtatg...387..	aaaaaatacaa	gggttcat
E.Cab	attaaaaa	gattaattttcc...287..	tttgtttacttaactatgg	GAAGAAGCATATTA	ttGTGT	cattctggttggtgtgtatg...386..	aaaaaatacaa	ggattcct
L.Afr	gttaaaaa	gattaattttcc...291..	tttgtttacttaactacgg	GAAGAAGCATATTA	ttGTGT	cattctggttggtgtgtatg...397..	aaaaaatacaa	gggttcat
	*****	**** *	*****	**** *	*****	*****	*****	**** *

id=761806 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50667967_50668726.1 type=E3 VIEW

Figure 457:



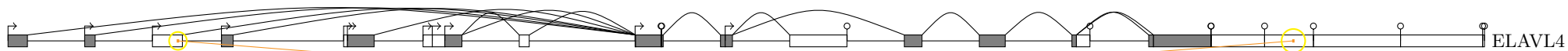
H. Sap	caggctgc	tcttgcaaagag...117...gcaagaaaattgaagaacc	TTTGCAGAc	GGAGTGC	tttgcaaaggattctatctg-...64...ttaaataatgag	gtaatatt
R. Mac	caggctgc	tcttgcaaagag...117...gcaagaaaattgaagaacc	TTTGCAGAc	GGAGTGC	tttgcaaaggattctatctg-...64...ttaaataatgag	gtaatatt
P. Tro	caggctgc	tcttgcaaagag...117...gcaagaaaattgaagaacc	TTTGCAGAc	GGAGTGC	tttgcaaaggattctatctg-...64...ttaaataatgag	gtaatatt
P. Abe	caggctgc	tcttgcaaagag...117...gcaagaaaattgaagaacc	TTTGCAGAc	GGAGTGC	tttgcaaaggattctgtttc-...60...ttaaataatgag	gtaatatt
C. Jac	caggctgc	tcttgcaaagag...117...gcaagaaaattgaagaacc	TTTGCAGAc	GGAGTGC	tttgcaaaggattctatctg-...64...ttaaataatgag	gtaatatt
M. Mus	caggctgc	tcttgcaaagag...116...gcaagaaaattgaagaacc	TTTGCAGAc	GGAGTGC	tttgcaaaggattctatctg-...64...ttaaataatgag	gtaatatt
R. Nor	caggctgc	tcttgcaaaggg...117...gcaagaaaattgaagaacc	TTTGCAGAc	GGAGTGC	tttgcaaaggattctatctg-...64...ttaaataatgag	gtaatatt
C. Por	caggctgc	tcttgcaaagag...118...gcaagaaaattgagctacc	TTTGCAGAc	GGAGTGC	tttgcaaa-gattctatctat...63...ttaaataatgag	gtaatatt
O. Cun	caggctgc	tctcgcaaagag...117...gcaagaaaattgaagaacc	TTTGCAGAc	GGAGTGC	tttgcaaaggattctatctg-...64...ttaaataatgag	gtaatatt
C. Fam	caggctgc	tccttctgcaa...119...gcaagcagcactgaagaacc	TTTGCAGAc	GGAGTGC	tttgcaaaggattctaactg-...64...ttaaataatgag	gtaatatt
B. Tau	caggctgc	tcttgcaaagag...117...gcaagaaaattgaagaacc	TTTGCAGAc	GGAGTGC	tttgcaaaggattctatctg-...64...ttaaataatgag	gtaatatt
E. Cab	caggctgc	tcttgcaaagag...117...gcaagaaaattgaagaacc	TTTGCAGAc	GGAGTGC	tttgcaaaggattctatctg-...64...ttaaataatgag	gtaatatt
L. Afr	caggcggc	tcttgcaagag...117...gcaagaaaattgaagaacc	TTTGCAGAc	GGAGTGC	tttgcaaaggattcttctg-...64...ttaaataatgag	gtaatatt
	**** *	** *	***	* **	*****	*****

id=761771 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50571362_50571622_1 type=AN

H. Sap	aaatacaa	gggttcatgctc...642...ttggtgtgttgaattattt	GTA	CTTTA	TCTG	tc	CAGA	caataaatgaaagtgtgtagaatg	gatttgac
R. Mac	aaatacaa	gggttcatgctc...643...ttggtgtgttgaattattt	GTA	CTTTA	TCTG	tc	CAGA	caataaatgaaagtgtgtagaatg	gatttgac
P. Tro	aaatacaa	gggttcatgctc...642...ttggtgtgttgaattattt	GTA	CTTTA	TCTG	tc	CAGA	caataaatgaaagtgtgtagaatg	gatttgac
P. Abe	aaatacaa	gggttcatgctc...642...ttggtgtgttgaattattt	GTA	CTTTA	TCTG	tc	CAGA	caataaatgaaagtgtgtagaatg	gatttgac
C. Jac	aaatacaa	gggttcatgctc...646...ttggtgtgttgaattattt	GTA	CTTTA	TCTG	tc	CAGA	caataaatgaaagtgtgtagaatg	gatctgac
M. Mus	aaatacaa	gagttcatgctc...651...ttggtgtgttgaattattt	GTA	CTTTA	TCTG	tc	CAGA	caataaatgaaagtgtgtagaatg	aatttgag
R. Nor	aaatccaa	gagttcatgctc...649...ttggtgtgttgaattattt	GTA	CTTTA	TCTG	tc	CAGA	caataaatgaaagtgtgtagaatg	aatttgag
C. Por	aaatacaa	gagttcatgctc...625...ctgttgtgttgaattattt	GTA	CTTTA	TCTG	tc	CAGA	caataaatgaaagtgtgtagaatg	aatttgag
O. Cun	aaataaaa	gagttcatgctc...648...ttggtgtgttgaattattt	GTA	CTTTA	TCTG	tc	CAGA	caataaatgaaagtgtgtagaatg	aatttgag
C. Fam	aaatacaa	gggttcatgctc...661...ttggtgtgttgaattattt	GTA	CTTTA	TCTG	tc	CAGA	caataaatgaaagtgtgtagaatg	gatttgag
B. Tau	aaatacaa	gggttcatgctc...658...ttggtgtgttgaattattt	GTA	CTTTA	TCTG	tc	CAGA	caataaatgaaagtgtgtagaatg	gatttgag
E. Cab	aaatacaa	ggattcctgctc...643...ttggtgtgttgaattattt	GTA	CTTTA	TCTG	tc	CAGA	caataaatgaaagtgtgtagaatg	gatttgag
L. Afr	aaatacaa	gggttcatgctc...651...ttggtgtgttgaattattt	GTA	CTTTA	TCTG	tc	CAGA	caataaatgaaagtgtgtagaatg	gatttgag
	**** *	* ** *	****	*****	*****	*****	*****	*****	** **

id=761807 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50668727_50669442_1 type=E3 VIEW

Figure 458:



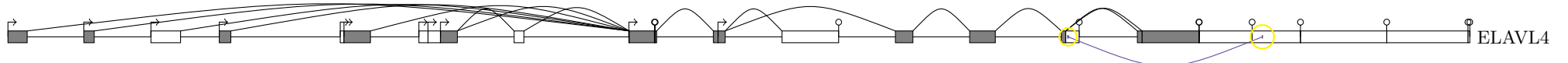
H.Sap	caggctgc	tcttgcaaagag...171...tgtttctcttaaaacaaaat	CTGTGGc	AAGATGtt	TGAAATCA	gcaggacgcttaatgctgctttgttaataatgag	gtaatatt
R.Mac	caggctgc	tcttgcaaagag...171...tgtttctcttaaaacaaaat	CTGTGGc	AAGATGtt	TGAAATCA	gcaggacgcttaatgctgctttgttaataatgag	gtaatatt
P.Tro	caggctgc	tcttgcaaagag...171...tgtttctcttaaaacaaaat	CTGTGGc	AAGATGtt	TGAAATCA	gcaggacgcttaatgctgctttgttaataatgag	gtaatatt
P.Abe	caggctgc	tcttgcaaagag...167...tgtttctcttaaaacaaaat	CTGTGGc	AAGATGtt	TGAAATCA	gcaggacgcttaatgctgctttgttaataatgag	gtaatatt
C.Jac	caggctgc	tcttgcaaagag...171...tgtttctcttaaaacaaaat	CTGTGGc	AAGATGtt	TGAAATCA	gcaggacgcttaatgctgctttgttaataatgag	gtaatatt
M.Mus	caggctgc	tcttgcaaagag...170...tgtttctcttaaaacaaaat	CTGTGGc	AAGATGtt	TGAAATCA	gcaggacgcttaatgctgctttgttaataatgag	gtaatatt
R.Nor	caggctgc	tcttgcaaagag...171...tgtttctcttaaaacaaaat	CTGTGGc	AAGATGtt	TGAAATCA	gcaggacgcttaatgctgctttgttaataatgag	gtaatatt
C.Por	caggctgc	tcttgcaaagag...171...tatttctcttaaaacaaaat	CTGTGGc	AAGATGtt	TGAAATCA	gcaggacgcttaatgctgctttgttaataatgag	gtaatatt
O.Cun	caggctgc	tcttgcaaagag...171...tgtttctcttaaaacaaaat	CTGTGGc	AAGATGtt	TGAAATCA	gcaggacgcttaatgctgctttgttaataatgag	gtaatatt
C.Fam	caggctgc	tccttctgcaa...173...tgtttctcttaaaacaaaat	CTGTGGc	AAGATGtt	TGAAATCA	gcaggacgcttaatgctgctttgttaataatgag	gtaatatt
B.Tau	caggctgc	tcttgcaaagag...171...tgtttctcttaaaacaaaat	CTGTGGc	AAGATGtt	TGAAATCA	gcaggacgcttaatgctgctttgttaataatgag	gtaatatt
E.Cab	caggctgc	tcttgcaaagag...171...tgtttctcttaaaacaaaat	CTGTGGc	AAGATGtt	TGAAATCA	gcaggacgcttaatgctgctttgttaataatgag	gtaatatt
L.Afr	caggcggc	tcttgcaaagag...171...tgtttctcttaaaacaaaat	CTGTGGc	AAGATGtt	TGAAATCA	gcaggacgcttaatgctgctttgttaataatgag	gtaatatt
**** *							

id=761771 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50571362.50571622.1 type=AN

H.Sap	ttgttgcc	aaagaggtggtc...201...aaggatgggctataaacaga	TGATc	TTCATATCTT	TCATAG	catgtaataataataaaaa...139...aaaaatataaaa	gattaatt
R.Mac	ttgttgcc	aaagaggtggtc...201...aaggatgggctataaacaga	TGATc	TTCATATCTT	TCATAG	catgtaataataataaaaa...139...aaaaatataaaa	gattaatt
P.Tro	ttgttgcc	aaagaggtggtc...201...aaggatgggctataaacaga	TGATc	TTCATATCTT	TCATAG	catgtaataataataaaaa...139...aaaaatataaaa	gattaatt
P.Abe	ttgttgcc	aaagaggtggtc...201...aaggatgggctataaacaga	TGATc	TTCATATCTT	TCATAG	catgtaataataataaaaa...136...aaaaatataaaa	gattaatt
C.Jac	ttgttgcc	aaagaggtggtc...201...aaggatgggctataaacaga	TGATc	TTCATATCTT	TCATAG	catgtaataataataaaaa...139...aaaaatataaaa	gattaatt
M.Mus	ttgttgcc	aaagaggtggtc...200...aaggatgggctataaacaga	TGATc	TTCATATCTT	TCATAG	catgtaataataataaaaa...134...aaaaatataaaa	gattcatt
R.Nor	ttgttgcc	aaagaggtggtc...200...aaggatgggctataaacaga	TGATc	TTCATATCTT	TCATAG	catgtaataataataaaaa...134...aaaaatataaaa	gattcatt
C.Por	ttgttgcc	aaagaggtggtc...201...aaggatgggctataaacaga	TGATc	TTCATATCTT	TCATAG	catgtaataataataaaaa...134...aaaaatataaaa	gattaatt
O.Cun	ttgttgcc	aaagaggtggtc...201...aaggatgggctataaacaga	TGATc	TTCATATCTT	TCATAG	catgtaataataataaaa...141...aaaaatataaaa	gattaatt
C.Fam	ttgttgcc	aaagaggtggtc...201...aaggatgggctataaacaga	TGATc	TTCATATCTT	TCATAG	catgtaataataataaaaa...138...aaaaatataaaa	gattaatt
B.Tau	ttgttgcc	aaagaggtggtc...201...aaggatgggctataaacaga	TGATc	TTCATATCTT	TCATAG	catgtaataataataaaaa...137...aaaaatataaaa	gattaatt
E.Cab	ttgttgcc	aaagaggtggtc...201...aaggatgggctataaacaga	TGATc	TTCATATCTT	TCATAG	catgtaataataataaaaa...136...aaaaatataaaa	gattaatt
L.Afr	ttgttgcc	aaagaggtggtc...203...aaggatgggctataaacaga	TGATc	TTCATATCTT	TCATAG	catgtaataataataaaaa...144...aaagtataaaa	gattaatt

id=761805 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50667541.50667966.1 type=E3 VIEW

Figure 459:



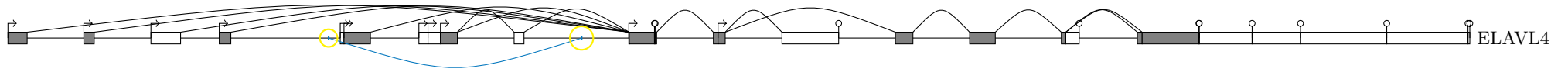
H. Sap	gtaaagag	gtaaTTAAAcTCCAcaGATTgccagatgtccatggtggca...65...cttttcttcca	ccagcatg
R. Mac	gtaaagag	gtaaTTAAAcTCCAcaGATTgccagatgtccatggtggca...72...cttttcttcca	ccagcatg
P. Tro	gtaaagag	gtaaTTAAAcTCCAcaGATTgccagatgtccatggtggca...65...cttttcttcca	ccagcatg
P. Abe	gtaaagag	gtaaTTAAAcTCCAcaGATTgccagatgtccatggtggca...72...cttttcttcca	ccagcatg
C. Jac	gtaaagag	gtaaTTAAAcTCCAcaGATTgccagatgtccatggtggca...61...cttttcttcca	ccagcatg
M. Mus	gtaaagag	gtaaTTAAAcTCCAcaGATTgccagatgtccgtggtggca...60...tttttcttcca	ccagcatg
R. Nor	gtaaagag	gtaaTTAAAcTCCAcaGATTgccagatgtccgtggtggca...62...cttttcttcca	ccagcatg
C. Por	gtaaagag	gtaaTTAAAcTCCAcaGATTgccagatgtccgtggtggca...59...cttttcttcca	ccagcatg
O. Cun	gtaaagag	gtaaTTAAAcTCCAcaGATTgccagatgtccgtggtggca...59...cttttcttcca	ccagcatg
C. Fam	gtaaagag	gtaaTTAAAcTCCAcaGATTgccagatgtccgtggtggca...67...cttttcttcca	ccagcatg
B. Tau	gtaaagag	gtaaTTAAAcTCCAcaGATTgccagatgtccgtggtggca...69...cttttcttcca	ccagcatg
E. Cab	gtaaagag	gtaaTTAAAcTCCAcaGATTgccagatgtccgtggtggca...65...cttttcttcca	ccagcatg
L. Afr	gtaaagag	gtaaTTAAAcTCCAcaGATTgccagatgtccgtggtggca...66...cttttcttcca	ccagcatg
*****	*****	*****	*****

id=761799 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50663140.50663257.1 type=AN

H. Sap	ttgttgcc	aaagaggtggtc...45...ataaagaatthttacaagagAATCTGGATTGGA--gaaaaaatatthttgactgg-...304...aaaaattaaaaa	gattaatt
R. Mac	ttgttgcc	aaagaggtggtc...45...ataaagaatthttacaagagAATCTGGATTGGA--gaaaaaatatthttgactgg-...304...aaaaattaaaaa	gattaatt
P. Tro	ttgttgcc	aaagaggtggtc...45...ataaagaatthttacaagagAATCTGGATTGGA--gaaaaaatatthttgactgg-...304...aaaaattaaaaa	gattaatt
P. Abe	ttgttgcc	aaagaggtggtc...45...ataaagaatthttacaagagAATCTGGATTGGA--gaaaaaatatthttgactgg-...301...aaaaattaaaaa	gattaatt
C. Jac	ttgttgcc	aaagaggtggtc...45...ataaagaatthttacaagagAATCTGGATTGGA--gaaaaaatatthttgactgg-...304...aaaaattaaaaa	gattaatt
M. Mus	ttgttgcc	aaagaggtggtc...45...ataaagaatthttacaagagAATCTGGATTGGA--gaaaaaatatthttgactgg-...298...aaaaattaaaaa	gattcatt
R. Nor	ttgttgcc	aaagaggtggtc...45...ataaagaatthttacaagagAATCTGGATTGGA--gaaaaaatatthttgactgg-...298...aaaaattaaaaa	gattcatt
C. Por	ttgttgcc	aaagaggtggtc...45...ataaagaatthttacaagagAATCTGGATTGGA--gaaaaaatatthttgactgg-...299...aaaaattaaaaa	gattaatt
O. Cun	ttgttgcc	aaagaggtggtc...45...ataaagaatthttacaagagAATCTGGATTGGA--gaaaaaatatthttgactgg-...306...aaaaattaaaaa	gattaatt
C. Fam	ttgttgcc	aaagaggtggtc...45...ataaagaatthttacaagagAATCTGGATTGGA--gaaaaaatatthttgactgg-...303...aaaaattaaaaa	gattaatt
B. Tau	ttgttgcc	aaagaggtggtc...45...ataaagaatthttacaagagAATCTGGATTGGA--gaaaaaatatthttgactgg-...302...aaaaattaaaaa	gattaatt
E. Cab	ttgttgcc	aaagaggtggtc...45...ataaagaatthttacaagagAATCTGGATTGGA--gaaaaaatatthttgactgg-...301...aaaaattaaaaa	gattaatt
L. Afr	ttgttgcc	aaagaggtggtc...45...ataaagaatthttacaagagAATCTGGATTGGA--gaaaaaatatthttgact--...311...aaaagttaaaaa	gattaatt
*****	*****	*****	*****

id=761805 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50667541.50667966.1 type=E3 VIEW

Figure 460:



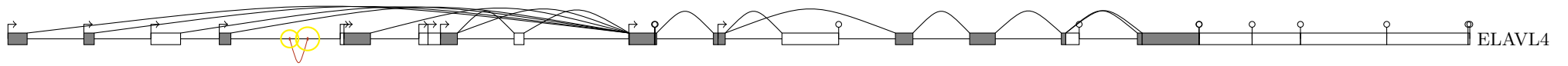
H. Sap	catttatg	gtaagaggaata...2386...	tcaatctggcagtagcta	TTAAATAGcACCTGaTGTG	caacgcctcccttcg	tttcc...69...	agccaatttcag	caaggctc
R. Mac	catttatg	gtaagaggaata...2385...	tcaatctggcagtagcta	TTAAATAGcACCTGaTGTG	caacgcctcccttcg	tttcc...69...	agccaatttcag	caaggctc
P. Tro	catttatg	gtaagaggaata...2388...	tcaatctggcagtagcta	TTAAATAGcACCTGaTGTG	caacgcctcccttcg	tttcc...69...	agccaatttcag	caaggctc
P. Abe	catttatg	gtaagaggaata...2384...	tcaatctggcagtagcta	TTAAATAGcACCTGaTGTG	caacgcctcccttcg	tttcc...69...	agccaatttcag	caaggctc
C. Jac	catttatg	gtaagaggaata...2383...	tcaatctggcagtagcta	TTAAATAGcACCTGaTGTG	caacgcctcccttcg	tttcc...69...	agccaatttcag	caaggctc
M. Mus	catttatg	gtaagagggaca...2493...	tcaatctggcagtagcta	TTAAATAGcACCTGaTGTG	caacgcctcccttcg	tttcc...69...	agccaatttcag	caaggctc
R. Nor	catttatg	gtaagggggaca...2518...	tcaatctggcagtagcta	TTAAATAGcACCTGaTGTG	caacgcctcccttcg	tttcc...69...	agccaatttcag	caaggctc
C. Por	catttatg	gtaagaggaata...2316...	ccaatctggcagtagcta	TTAAATAGccCCTGaTGTG	caacgcctcccttcg	tttcc...69...	agccaatttcac	caaggctc
O. Cun	catttatg	gtaagaggaatg...2381...	tcaatctggcagtagcta	TTAAATAGcACCTGaTGTG	caacgcctccttcg	tttcc...69...	agccaatttcag	caaggctc
C. Fam	catttatg	gtaagagggatc...2417...	tcaatctggcagtagcta	TTAAATAGcACCTGaTGTG	caacgcctcccttcg	tttcc...69...	agccaatttcag	caaggctc
F. Cat	catttatg	gtaagagggata...2378...	tcaatctggcagtagcta	TTAAATAGcACCTGaTGTG	caacgcctcccttcg	tttcc...69...	agccaatttcag	caaggctc
B. Tau	catttatg	gtaagaaggata...2373...	tcaatctggcagtagcta	TTAAATAGcACCTGaTGTG	caacgcctcccttcg	tttcc...69...	agccaatttcag	caaggctc
E. Cab	catttatg	gtaagagggata...2350...	tcaatctggcagtagcta	TTAAATAGcACCTGaTGTG	caacgcctccttcg	tttcc...69...	agccaatttcag	caaggctc
O. Avi	catttatg	gtaagaaggata...2377...	tcaatctggcagtagcta	TTAAATAGcACCTGaTGTG	caacgcctcccttcg	tttcc...69...	agccaatttcag	caaggctc
L. Afr	catttatg	gtaagaggaata...2413...	tcaatctggcagtagcta	TTAAATAGcACCTGaTGTG	caacgcccccttcg	tttcc...69...	agccaatttcag	caaggctc
	*****	***** * *	*****	*****	*****	*****	*****	*****

id=761774 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50572066.50574604.1 type=IN

H. Sap	acatgatg	gtaaagaatcct...2629...	atcttattttatgagatagt	TAATAaaCAGGTA	CTGTatTTGA	tcttgtgagtgtagc	cctct...378...	ttttatttttat	ttagataa
R. Mac	acatgatg	gtaaagaatcct...2644...	atcttattttatgagatagt	TAATAaaCAGGTA	CTGTatTTGA	tcttgtgagtgtagc	cctct...379...	ttttatttttat	ttagataa
P. Tro	acatgatg	gtaaagaatcct...2520...	atcttattttatgagatagt	TAATAaaCAGGTA	CTGTatTTGA	tcttgtgagtgtagc	cctct...378...	ttttatttttat	ttagataa
P. Abe	acatgatg	gtaaagaatcct...2630...	atcttattttatgagatagt	TAATAaaCAGGTA	CTGTatTTGA	tcttgtgagtgtagc	cctct...378...	ttttatttttat	ttagataa
C. Jac	acatgatg	gtaaagaatcct...2567...	atcttattttatgagatagt	TAATAaaCAGGTA	CTGTatTTGA	tcttgtgagtgtagc	cctct...375...	ttttatttttat	ttagataa
M. Mus	acacgatg	gtaaagaactt...3442...	atcttattttatgagatagt	TAATAaaCAGGTA	CTGTatTTGA	tcttgtgagtgtagc	cctct...364...	acttttttttat	ttagataa
R. Nor	ccgtgatg	gtaaagaactg...2761...	atcttattttatgagatagt	TAATAaaCAGGTA	CTGTatTTGA	tcttgtgagtgtagc	cctct...364...	ttattgttttat	ttagataa
C. Por	acatgatg	gtaaagaactcg...2532...	atcttattttatgagatagt	TAATAaaCAGGTA	CTGTatTTGA	tcttgtgagtgtagc	cctct...377...	tatttttttat	ttagataa
O. Cun	acatgatg	attaagaatcat...3172...	atcttattttatgagatagt	TAATAaaCAGGTA	CTGTatTTGA	tcttgtgagtgtagc	cctct...381...	tatttttttat	ttagataa
C. Fam	acatgatg	gtaaagaatcct...2437...	atcttattttatgagatagt	TAATAaaCAGGTA	CTGTatTTGA	tcttgtgagtgtagc	cctct...386...	ttttatttttat	ttagataa
F. Cat	ttataatg	ataaagaatcct...2939...	atcttattttatgagatagt	TAATAaaCAGGTA	CTGTatTTGA	tcttgtgagtgtagc	cctct...387...	ttttatttttat	ttagataa
B. Tau	acgtgatg	gcaaagaatcct...2463...	atcttattttatgagatagt	TAATAaaCAGGTA	CTGTatTTGA	tcttgtgagtgtagc	cctct...377...	ttttatttttat	ttagataa
E. Cab	acatgacg	gtaaagaatcct...2322...	atcttattttatgagatagt	TAATAaaCAGGTA	CTGTatTTGA	tcttgtgagtgtagc	cctct...384...	tcttatttttat	ttagataa
O. Avi	acatgatg	gcaaagaatcct...2465...	atcttattttatgagatagt	TAATAaaCAGGTA	CTGTatTTGA	tcttgtgagtgtagc	cctct...377...	ttttatttttat	ttagataa
L. Afr	acatgatg	gtaaagaatcct...2631...	atcttattttatgagatagt	TAATAaaCAGGTA	CTGTatTTGA	tcttgtgagtgtagc	cctct...386...	ttttatttttat	ttagataa
	* *	***** *	***** *	*****	*****	*****	*****	*****	*****

id=761783 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50607531.50610624.1 type=IN VIEW

Figure 461:



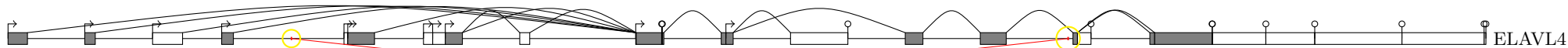
H. Sap	catttatg	gtaagaggaata...2047...agcctacaggcagatcatta	AATATGCAtt	TCGCT	agaagcaactgtctagaaa-----	...413...agccaatttcag	caaggctc
R. Mac	catttatg	gtaagaggaata...2044...agcctacaggcagatcatta	AATATGCAtt	TCGCT	agaagcaactgtctagaaa-----	...415...agccaatttcag	caaggctc
P. Tro	catttatg	gtaagaggaata...2049...agcctacagacagatcatta	AATATGCAtt	TCGCT	agaagcaactgtctagaaa-----	...413...agccaatttcag	caaggctc
P. Abe	catttatg	gtaagaggaata...2045...agcctacaggcagatcatta	AATATGCAtt	TCGCT	agaagcaactgtctagaaa-----	...413...agccaatttcag	caaggctc
C. Jac	catttatg	gtaagaggaata...2046...agcctacaggcagatcatta	AATATGCAtt	TCGCT	agaagcaactgtctagaaa-----	...411...agccaatttcag	caaggctc
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O. Cun	catttatg	gtaagaggaatg...2044...agcctagaggcagatcatta	AATATGCAtt	TCGCT	agaagcaactgtcgagaaa-----	...411...agccaatttcag	caaggctc
C. Fam	catttatg	gtaagagggatc...2073...agcctagaggcagatcatta	AATATGCAtt	TCGCT	agaagcaactgtcgagaaa-----	...418...agccaatttcag	caaggctc
F. Cat	catttatg	gtaagagggata...2041...agcctagaggcagatcatta	AATATGCAtt	TCGCT	agaagcaactgtccagaaa-----	...411...agccaatttcag	caaggctc
B. Tau	catttatg	gtaagaaggata...2037...agcccagaggcagatcatta	AATATGCAtt	TCGCT	agaagcaactgtcgaaaa-----	...410...agccaatttcag	caaggctc
E. Cab	catttatg	gtaagagggata...2014...agcctagaggcagatcatta	AATATGCAtt	TCGCT	agaagcaactgtggagaaa-----	...410...agccaatttcag	caaggctc
O. Avi	catttatg	gtaagaaggata...2040...agcccagaggcagatcatta	AATATGCAtt	TCGCT	agaagcaactgtcgaaaa-----	...411...agccaatttcag	caaggctc
L. Afr	catttatg	gtaagaggaata...2076...agcctagaggcagatcatta	AATATGCAtt	TCGCT	agaagcaactgtcgagaaa-----	...411...agccaatttcag	caaggctc
	*****	***** * **		*** * **	*****		*****

id=761774 gene=ENSG00000162374 name=ELAVL4 segment=chr1_50572066_50574604_1 type=IN

H. Sap	catttatg	gtaagaggaata...2203...-----gtttaggtttgcaagcctcc-----	AGTGA	ccTGCA	gtTGTT	acgttac-tttgagctggga...255...agccaatttcag	caaggctc	
R. Mac	catttatg	gtaagaggaata...2202...-----gtcaaggtttgcaagcctcc-----	AGTGA	ccTGCA	gtTGTT	acgttac-tttgagctggga...255...agccaatttcag	caaggctc	
P. Tro	catttatg	gtaagaggaata...2205...-----gtttaggtttgcaagcctcc-----	AGTGA	ccTGCA	gtTGTT	acgttac-tttgagctggga...255...agccaatttcag	caaggctc	
P. Abe	catttatg	gtaagaggaata...2201...-----gttaaggtttgcaagcctcc-----	AGTGA	ccTGCA	gtTGTT	acgttac-tttgagcttagga...255...agccaatttcag	caaggctc	
C. Jac	catttatg	gtaagaggaata...2200...-----gttaaggtttgcaagcctcc-----	AGTGA	ccTGCA	gtTGTT	acgttaa-tttgagctggga...255...agccaatttcag	caaggctc	
C. Por	catttatg	gtaagaggaata...2134...cccactgttaaggtttgcaa-----	GCTTTC	CAGTGA	ccTGCA	gtTGTT	acgttac-tttgaggaagaa...248...agccaatttcac	caaggctc
O. Cun	catttatg	gtaagaggaatg...2198...-----gttaggtttttaaagcctcc-----	AGTGA	ccTGCA	gtTGTT	acgttac-tttgagctagga...255...agccaatttcag	caaggctc	
C. Fam	catttatg	gtaagagggatc...2234...-----tttgcaagcagcgccgtcc	GGTGA	ccTGCA	gtTGTT	acgttac-tttgagcttagga...255...agccaatttcag	caaggctc	
F. Cat	catttatg	gtaagagggata...2195...-----attaaggtttgcaagcggcg	GGTGA	ccTGCA	gtTGTT	acgttac-tttgagctggga...255...agccaatttcag	caaggctc	
B. Tau	catttatg	gtaagaaggata...2190...-----gttaaggtttgtaagcggcc	AGTGA	ccTGCA	gtTGTT	acgttac-tttgactggga...255...agccaatttcag	caaggctc	
E. Cab	catttatg	gtaagagggata...2168...-----gttaaggtttgcaagcgtcc	AGTGA	ccTGCA	gtTGTT	acgttac-tttgagctggga...254...agccaatttcag	caaggctc	
O. Avi	catttatg	gtaagaaggata...2193...-----gttaaggtttgcaagcggcc	AGTGA	ccTGCA	gtTGTT	acgttacttttgaactggg-...256...agccaatttcag	caaggctc	
L. Afr	catttatg	gtaagaggaata...2231...-----attgaggtttgcaagcggcc	AGTGA	ccTGCA	gtTGTT	acgttac-tttgagctggga...254...agccaatttcag	caaggctc	
	*****	***** * **		*** *	****	*****	*****	

id=761774 gene=ENSG00000162374 name=ELAVL4 segment=chr1_50572066_50574604_1 type=IN VIEW

Figure 462:



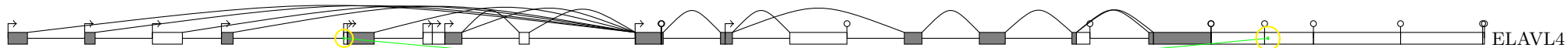
H. Sap	catttatg	gtaagaggaata...2035...---	gttgtac	ctttaagc	tacagc	GGCAGATC	TTAA	at	atgcatttcg	tagaaaag...427...agccaatttcag	caaggctc
R. Mac	catttatg	gtaagaggaata...2032...---	gttgtat	ctttaagc	tacagc	GGCAGATC	TTAA	at	atgcatttcg	tagaaaag...429...agccaatttcag	caaggctc
P. Abe	catttatg	gtaagaggaata...2033...---	gttgtat	ctttaagc	tacagc	GGCAGATC	TTAA	at	atgcatttcg	tagaaaag...427...agccaatttcag	caaggctc
C. Jac	catttatg	gtaagaggaata...2034...---	gttgtat	ctttaagc	tacagc	GGCAGATC	TTAA	at	atgcatttcg	tagaaaag...425...agccaatttcag	caaggctc
M. Mus	catttatg	gtaagagggaca...2139...ttttgtt	gtatctt	taagcc	TAGAGGCAGATC	CATTAA	at	atgcatttcg	tagaaaag...426...agccaatttcag	caaggctc	
R. Nor	catttatg	gtaagggggaca...2164...ttttgtt	gtatctt	taagcc	TAGAGGCAGATC	CATTAA	at	atgcatttcg	tagaaaag...426...agccaatttcag	caaggctc	
C. Por	catttatg	gtaagaggaata...1973...ttttgtt	gtatctt	taagcc	TAGAGGCAGATC	TTAA	at	atgcatttcg	tagaaaag...415...agccaatttcag	caaggctc	
O. Cun	catttatg	gtaagaggaatg...2028...ttttgtt	gtatctt	taagcc	TAGAGGCAGATC	TTAA	at	atgcatttcg	tagaaaag...425...agccaatttcag	caaggctc	
C. Fam	catttatg	gtaagagggatc...2057...ttttgtt	gtatctt	taagcc	TAGAGGCAGATC	TTAA	at	atgcatttcg	tagaaaag...432...agccaatttcag	caaggctc	
F. Cat	catttatg	gtaagagggata...2025...ttttgtt	gtatctt	taagcc	TAGAGGCAGATC	TTAA	at	atgcatttcg	tagaaaag...425...agccaatttcag	caaggctc	
B. Tau	catttatg	gtaagaaggata...2021...ttttgtt	gtatctt	taagcc	CAGAGGCAGATC	TTAA	at	atgcatttcg	tagaaaag...424...agccaatttcag	caaggctc	
E. Cab	catttatg	gtaagagggata...1998...ttttgtt	gtatctt	taagcc	TAGAGGCAGATC	TTAA	at	atgcatttcg	tagaaaag...424...agccaatttcag	caaggctc	
L. Afr	catttatg	gtaagaggaata...2060...ttttgtt	gtatctt	taagcc	TAGAGGCAGATC	TTAA	at	atgcatttcg	tagaaaag...425...agccaatttcag	caaggctc	
	*****	***** * *	*****	*****	*****	*****	*****	*****	*****	*****	*****

id=761774 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50572066_50574604_1 type=IN

H. Sap	aggttcag	gtaggc	atgccc...1553...cattctt	ataatag	ttccaTTGA	gcGATC	tTGCC	atctgtg	aggcatta	accagag	accctc	cttctctt	gtcag	gctggaca
R. Mac	aggttcag	gtaggc	atgccc...1552...cattctt	ataatag	ttccaTTGA	gcGATC	tTGCC	atctgtg	aggcatta	accagag	accctc	cttctctt	gtcag	gctggaca
P. Abe	aggttcag	gtaggc	atgccc...1555...cattctt	ataatag	ttccaTTGA	gcGATC	tTGCC	atctgtg	aggcatta	accagag	accctc	cttctctt	gtcag	gctggaca
C. Jac	aggttcag	gtaggc	atgccc...1540...cattctt	ataatag	ttccaTTGA	gcGATC	tTGCC	atctgtg	aggcatta	accagag	accctc	cttctctt	gtcag	gctggaca
M. Mus	agattcag	gtaggc	atgccc...1558...cattctt	ataatag	ttccaTTGA	gcTGATC	tTGCC	aTCTG	cgaggc	attaacc	agagacc	ctcctt	ctctt	gtcag
R. Nor	agattcag	gtaggc	atgccc...1531...cattctt	ataatag	ttccaTTGA	gcTGATC	tTGCC	aTCTG	cgaggc	attaacc	agagacc	ctcctt	ctctt	gtcag
C. Por	aggttcag	gtaggc	atgccc...1472...cattctt	ataatag	ttccaTTGA	gcGATC	tTGCC	aTCTG	tgaggc	attaacc	agagacc	ctcctt	ctctt	gtcag
O. Cun	aggttcag	gtaggc	atgccc...1552...cattctt	ataatag	ttccaTTGA	gcGATC	tTGCC	aTCTG	tgaggc	attaacc	agagacc	ctcctt	ctctt	gtcag
C. Fam	aggttcag	gtaggc	atgccc...1538...cattctt	ataatag	ttccaTTGA	gcGATC	tTGCC	aTCTG	tgaggc	attaacc	agagacc	ctcctt	ctctt	gtcag
F. Cat	agattcag	gtaggc	atgccc...2355...cattctt	ataatag	ttccaTTGA	gcGATC	tTGCC	aTCTG	tgaggc	attaacc	agagacc	ctcctt	ctctt	gtcag
B. Tau	aggttcag	gtaggt	gtaccc...1513...cattctt	ataatag	ttccaTTGA	gcGATC	tTGCC	aTCTG	tgaggc	attaacc	agagacc	ctcctt	ctctt	gtcag
E. Cab	aggttcag	gtaggc	atgccc...1518...cattctt	ataatag	ttccaTTGA	gcGATC	tTGCC	aTCTG	tgaggc	attaacc	agagacc	ctcctt	ctctt	gtcag
L. Afr	aggttcag	gtaggt	atgccc...1764...cattctt	ataatag	ttccaTTGA	gcGATC	tTGCC	aTCTG	tgaggc	attaacc	agagacc	ctcctt	ctctt	gtcag
	** *****	*****	*****	*	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

id=761797 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50661459_50663100_1 type=IN VIEW

Figure 463: CS=3.9



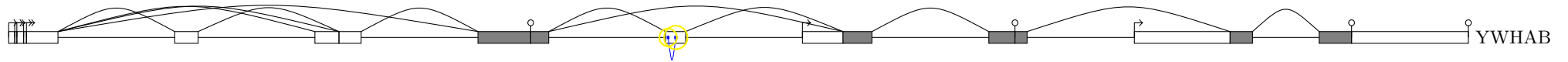
H. Sap	catttatg gtaagaggaata...2494...atgtaaaaaggggaagcttc	GAGCCaATTTCAG	CAAGGctc
R. Mac	catttatg gtaagaggaata...2493...atgtaaaaaggggaagcttc	GAGCCaATTTCAG	CAAGGctc
P. Tro	catttatg gtaagaggaata...2496...atgtaaaaaggggaagcttc	GAGCCaATTTCAG	CAAGGctc
P. Abe	catttatg gtaagaggaata...2492...atgtaaaaaggggaagcttc	GAGCCaATTTCAG	CAAGGctc
C. Jac	catttatg gtaagaggaata...2491...atgtaaaaaggggaagcttc	GAGCCaATTTCAG	CAAGGctc
M. Mus	catttatg gtaagagggaca...2601...atgtaaaaaggggaagcttc	GAGCCaATTTCAG	CAAGGctc
R. Nor	catttatg gtaagggggaca...2626...atgtaaaaaggggaagcttc	GAGCCaATTTCAG	CAAGGctc
C. Por	catttatg gtaagaggaata...2425...-tgtaaaaaggggaagcttcg	AGCCaATTTCaC	CAAGGctc
O. Cun	catttatg gtaagaggaatg...2489...atgtaaaaaggggaagcttc	GAGCCaATTTCAG	CAAGGctc
C. Fam	catttatg gtaagagggatc...2525...atgtaaaaaggggaagcttc	GAGCCaATTTCAG	CAAGGctc
B. Tau	catttatg gtaagaaggata...2481...atgtaaaaaggggaagcttc	GAGCCaATTTCAG	CAAGGctc
E. Cab	catttatg gtaagagggata...2458...atgtaaaaaggggaagcttc	GAGCCaATTTCAG	CAAGGctc
L. Afr	catttatg gtaagaggaata...2521...atgtaaaaaggagaagcttc	GAGCCaATTTCAG	CAAGGctc
	*****	*****	*****

id=761774 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50572066_50574604_1 type=IN

H. Sap	ttgttgcc aaagaggtggtct	CTTTGCTGAAATgGGTTT	caagaaaaatctatttttat...362...aaaaattaaaaa	gattaatt
R. Mac	ttgttgcc aaagaggtggtct	CTTTGCTGAAATgGGTTT	caagaaaaatctatttttat...362...aaaaattaaaaa	gattaatt
P. Tro	ttgttgcc aaagaggtggtct	CTTTGCTGAAATgGGTTT	caagaaaaatctatttttat...362...aaaaattaaaaa	gattaatt
P. Abe	ttgttgcc aaagaggtggtct	CTTTGCTGAAATgGGTTT	caagaaaaatctatttttat...359...aaaaattaaaaa	gattaatt
C. Jac	ttgttgcc aaagaggtggtct	CTTTGCTGAAATgGGTTT	caagaaaaatctatttttat...362...aaaaattaaaaa	gattaatt
M. Mus	ttgttgcc aaagaggtggtct	CTTTGCTGAAATgGGTTT	caagaaaaatctatttttat...356...aaaaattaaaaa	gattcatt
R. Nor	ttgttgcc aaagaggtggtct	CTTTGCTGAAATgGGTTT	caagaaaaatctatttttat...356...aaaaattaaaaa	gattcatt
C. Por	ttgttgcc aaagaggtggtct	CTTTGCTGAAATgGGTTT	caagaaaaatctatttttat...358...aaaaattaaaaa	gattaatt
O. Cun	ttgttgcc aaagaggtggtct	CTTTGCTGAAATgGGTTT	caagaaaaatctatttttat...364...aaaaattaaaaa	gattaatt
C. Fam	ttgttgcc aaagaggtggtct	CTTTGCTGAAATgGGTTT	caagaaaaatctatttttat...361...aaaaattaaaaa	gattaatt
B. Tau	ttgttgcc aaagaggtggtct	CTTTGCTGAAATgGGTTT	caagaaaaatctatttttat...360...aaaaattaaaaa	gattaatt
E. Cab	ttgttgcc aaagaggtggtct	CTTTGCTGAAATgGGTTT	caagaaaaatctatttttat...359...aaaaattaaaaa	gattaatt
L. Afr	ttgttgcc aaagaggtggtct	CTTTGCTGAAATgGGTTT	caagaaaaatctatttttat...369...aaaagttaaaaa	gattaatt
	*****	*****	****	*****

id=761805 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50667541_50667966_1 type=E3 VIEW

Figure 464:



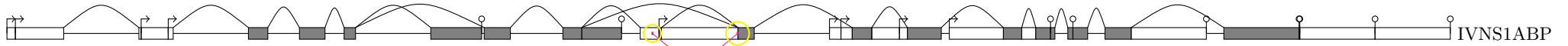
H. Sap	ttaacCAG	TTTTTCAGGA	gccacattctaaacaact...44...actacttttggt	gtaagcat
R. Mac	ttaacCAG	TTTTTCAGGA	gccacattctaaacaact...44...actacttttggt	gtaagcat
P. Tro	ttaacCAG	TTTTTCAGGA	gccacattctaaacaact...44...actacttttggt	gtaagcat
P. Abe	ttaacCAG	TTTTTCAGGA	gccacattctaaacaact...44...actacttttggt	gtaagcat
C. Jac	ttaacCAG	TTTTTCAGGA	gccacattctaaacaact...44...actacttttggt	gtaagcat
C. Por	ttaacCAG	TTTTTCAGGA	gccacattctaaacaact...44...actacttttggt	gtaagcat
O. Cun	ttaacCAG	TTTTTCAGGA	gccacattctaaacaact...44...actacttttggt	gtaagcat
C. Fam	ttaacCAG	TTTTTCAGGA	gccacattctaaacaact...44...actgcttttggt	gtaagcat
F. Cat	ttaacCAG	TTTTTCAGGA	gccacattctaaacaact...44...actgcttttggt	gtaagcat
B. Tau	ttaacCAG	TTTTTCAGGA	gccacattctaaacaact...44...actgcttttggt	gtaagcat
E. Cab	ttaacCAG	TTTTTCAGGA	gccacattctaaacaact...44...actgcttttggt	gtaagcat
S. Sus	ttaacCAG	TTTTTCAGGA	gccacattctaaacaact...44...actgcttttggt	gtaagcat
O. Avi	ttaacCAG	TTTTTCAGGA	gccacattctaaacaact...44...actgcttttggt	gtaagcat
L. Afr	ttaacCAG	TTTTTCAGGA	gccacattctaaacaact...44...actacttttggt	gtaagcat
*****	*****	*****	*****	*****

id=475405 gene=ENSG00000166913 name=YWHAB segment=chr20.43531677_43531762.1 type=AN

H. Sap	ttaaccag	tttttcaggatgccacattctaaacaac	TCTTcGAAAAAtATTG	ctctgtatacgaagcttggactccttcagaactacttttggt	gtaagcat
R. Mac	ttaaccag	tttttcaggatgccacattctaaacaac	TCTTcGAAAAAtATTG	ctctgtatacgaagcttggactccttcagaactacttttggt	gtaagcat
P. Tro	ttaaccag	tttttcaggatgccacattctaaacaac	TCTTcGAAAAAtATTG	ctctgtatacgaagcttggactccttcagaactacttttggt	gtaagcat
P. Abe	ttaaccag	tttttcaggatgccacattctaaacaac	TCTTcGAAAAAtATTG	ctctgtatacgaagcttggactccttcagaactacttttggt	gtaagcat
C. Jac	ttaaccag	tttttcaggatgccacattctaaacaac	TCTTcGAAAAAtATTG	ctctgtatacgaagcttggactccttcagaactacttttggt	gtaagcat
C. Por	ttaaccag	tttttcaggatgccacattctaaacaac	TCTTcGAAAAAtATTG	ctctgtatacgaagcttggactccttcagaactacttttggt	gtaagcat
O. Cun	ttaaccag	tttttcaggatgccacattctaaacaac	TCTTcGAAAAAtATTG	ctctgtatacgaagcttggactccttcagaactacttttggt	gtaagcat
C. Fam	ttaaccag	tttttcaggatgccacattctaaacaac	TCTTcGAAAAAtATTG	ctctgtatacgaagcttggactccttcagaactgcttttggt	gtaagcat
F. Cat	ttaaccag	tttttcaggatgccacattctaaacaac	TCTTcGAAAAAtATTG	ctctgtatacgaagcttggactccttcagaactgcttttggt	gtaagcat
B. Tau	ttaaccag	tttttcaggatgccacattctaaacaac	TCTTcGAAAAAtATTG	ctctgtatacgaagcgtggactccttcacaactgcttttggt	gtaagcat
E. Cab	ttaaccag	tttttcaggatgccacattctaaacaac	TCTTcGAAAAAtATTG	ctctgtatacgaagcttggactccttcagaactgcttttggt	gtaagcat
S. Sus	ttaaccag	tttttcaggatgccacattctaaacaac	TCTTcGAAAAAtATTG	ctctgtatacgaagcttggactccttcagaactgcttttggt	gtaagcat
O. Avi	ttaaccag	tttttcaggatgccacattctaaacaac	TCTTcGAAAAAtATTG	ctctgtatacgaagcgtggactccttcacaactgcttttggt	gtaagcat
L. Afr	ttaaccag	tttttcaggatgccacattctaaacaac	TCTTcGAAAAAtATTG	ctctgtatacgaagcgtggactccttcagaactacttttggt	gtaagcat
*****	*****	*****	*****	*****	*****

id=475405 gene=ENSG00000166913 name=YWHAB segment=chr20.43531677_43531762.1 type=AN VIEW

Figure 465:



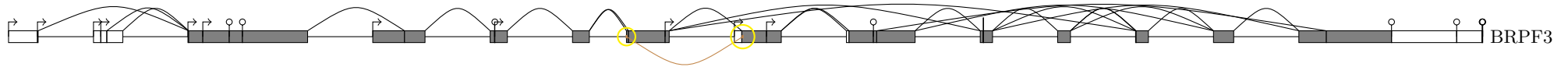
H. Sap	ccccatag	gtttattaacaa...34...aacctcaagtgattgacac	---GTAAGAAGCAGCAG	tctctgcccagttctcctaagaaaaatccgctgtgggcagagaa	cgatgatg
R. Mac	ccccatag	gtttattaacaa...34...aacctcaagtgattgacac	---GTAAGAAGCAGCAG	tctctgcccagttctcctaagaaaaatccgctgtgggcagagaa	cgatgatg
P. Tro	ccccatag	gtttattaacaa...34...aacctcaagtgattgacac	---GTAAGAAGCAGCAG	tctctgcccagttctcctaagaaaaatccgctgtgggcagagaa	cgatgatg
P. Abe	ccccatag	gtttattaacaa...34...aacctcaagtgattgacac	---GTAAGAAGCAGCAG	tctctgcccagttctcctaagaaaaatccgctgtgggcagagaa	cgatgatg
C. Jac	ccccatag	gtttattaacaa...34...aacctcaagtgattgacac	---GTAAGAAGCAGCAG	tctctgcccagttctcctaagaaaaatccgctgtgggcagagaa	cgatgatg
M. Mus	ccccatag	gtttattaacaa...38...---tcgagtgattgacacacac	---GTAAGAAGCAGCAG	tctctgcccagttctcctaagaaaaatccgctgtgggcagagag	cgatgatg
R. Nor	ccccatag	gtttattaacaa...34...aacctcagtgattgacac	---GTAAGAAGCAGCAG	tctctgcccagttctcctaagaaaaatccgctgtgggcagagag	cgatgatg
C. Por	ccccatag	gtttattaacaa...36...--cctcaagtgattgacacgt	---AAAGAAGCAGCAG	tctctgcccagttctcctaagaaaaatccgctgtgggcagagaa	cgatgatg
O. Cun	ccccatag	gtttattaacaa...34...aacctcaagtgattgacac	---GTAAGAAGCAGCAG	tctctgcccagttctcctaagaaaaatccgctgtgggcagagaa	cgatgatg
C. Fam	ccccatag	gtttattaacaa...34...aacctcaagtgattgacac	---GTAAGAAGCAGCAG	tctctgcccagttctcctaagaaaaatccgctgtgggcagagaa	cgatgatg
F. Cat	ccccatag	gtttattaacaa...34...aacctcaagtgattgacac	---GTAAGAAGCAGCAG	tctctgcccagttctcctaagaaaaatccgctgtgggcagagaa	cgatgatg
B. Tau	ccccatag	gtttattaacaa...34...atcctcaagtgattgacac	---GTAAGAAGCAGCAG	tctctgcccagttctcctaagaaaaatccgctgtgggcagagaa	cgatgatg
E. Cab	ccccatag	gtttattaacaa...34...aacctcaagtgattgacac	---GTAAGAAGCAGCAG	tctctgcccagttctcctaagaaaaatccgctgtgggcagagaa	cgatgatg
S. Sus	ccccatag	gtttattaacaa...34...aacctcaagtgattgacac	---GTAAGAAGCAGCAG	tctctgcccagttctcctaagaaaaatccgctgtgggcagagaa	cgatgatg
L. Afr	ccccatag	gtttattaacaa...34...aacctcaagtgattgacac	---GTAAGAAGCAGCAG	tctctgcccagttctcctaagaaaaatccgctgtgggcagagaa	cgatgatg
	*****	*****	** *****	*****	*****

id=602676 gene=ENSG00000116679 name=IVNS1ABP segment=chr1.185275633_185275757_-1 type=AN

H. Sap	atttaatg	gtgtttactcct...792...accgtagccacatgggtggt	CTGTTGCTgTTTGCag	gttcaaac
R. Mac	atttaatg	gtgtttactcct...796...accgtagccacatgggtggt	CTGTTGCTgTTTGCag	gttcaaac
P. Tro	atttaatg	gtgtttactcct...792...accgtagccacatgggtggt	CTGTTGCTgTTTGCag	gttcaaac
P. Abe	atttaatg	gtgtttactcct...794...accgtagccacatgggtggt	CTGTTGCTgTTTGCag	gttcaaac
C. Jac	atttaatg	gtgtttactcct...793...accgtagccacatgggtggt	CTGTTGCTgTTTGCag	gttcaaac
M. Mus	atttaatg	gtgtttactcct...768...acagtagccacatgggtggt	CTGTTGCTgTTTGCag	gttcaaac
R. Nor	atttaatg	gtgtttactcct...774...acagtagccacatgggtggt	CTGTTGCTgTTTGCag	gttcaaac
C. Por	atttaatg	gtgtttactcct...775...acagtagccacatgggtggt	CTGTTGCTgTTTTcag	gttcaaac
O. Cun	atttaacg	gtgtttactcct...760...acagtagccacatgggtggt	CTGTTGCTgTTTGCag	gttcaaac
C. Fam	atttaatg	gtgtttactcct...764...acggtagccacatgggtggt	CTGTTGCTgTTTGCag	gttcaaac
F. Cat	atttaatg	gtgtttactcct...741...acggtagccacatgggtggt	CTGTTGCTgTTTGCag	gttcaaac
B. Tau	atttaatg	gtgtttactcct...793...acagtagccacatgggtggt	CTGTTGCTgTTTGCag	gttcaaac
E. Cab	atttaatg	gtgtttactcct...773...acggtagccacatgggtggt	CTGTTGCTgTTTGCag	gttcaaac
S. Sus	atttaatg	gtgtttactcct...773...acagtagccacatgggtggt	CTGTTGCTgTTTGCag	gttcaaac
L. Afr	atttaatg	gtgtttactcct...771...acagtagccacatgggtggt	CTGTTGCTgTTTGCag	gttcaaac
	*****	*****	** * *****	*****

id=602678 gene=ENSG00000116679 name=IVNS1ABP segment=chr1.185274776_185275616_-1 type=AN VIEW

Figure 466:



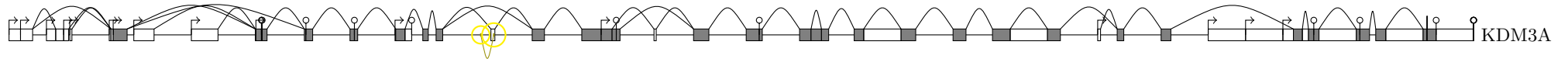
H. Sap	tgagtgag	gcaagttcccc...238...tgtttgctagtaaatggtt	GTTGTaATTGTaCAG	Gttttata
R. Mac	tgagtgag	gcaagttcccc...238...tgtttgctagtaaatggtt	GTTGTaATTGTaCAG	Gttttata
P. Tro	tgagtgag	gcaagttcccc...238...tgtttgctagtaaatggtt	GTTGTaATTGTaCAG	Gttttata
P. Abe	tgagtgag	gcaagttcccc...238...tgtttgctagtaaatggtt	GTTGTaATTGTaCAG	Gttttata
M. Mus	tgagtgag	gcaagttgcccc...230...cgtgaggctcataaatggtt	GTTGTaATTGTaCAG	Gttttata
R. Nor	tcagtgag	gcaagtcaccct...221...cgtgtggctcataaatagtt	GTTGTaATTGTaCAG	Gttttata
C. Por	tgagcgag	gcaagtcacccc...232...tggtgactagtaagtgggt	GTTGTaATTGTaCAG	Gttttata
O. Cun	tcagtgag	gcaagtttcccc...240...tgtttgctagtaaatggtt	GTTGTaATTGTaCAG	Gttttata
C. Fam	tgagtgag	gcaagttccctc...232...tgtttgctagtaaatggtt	GTTGTaATTGTaCAG	Gttttata
F. Cat	tgagtgag	gcaagttccccca...227...tgtttgctagtaaatggtt	GTTGTaATTGTaCAG	Gttttata
B. Tau	tgagtgag	gcaagttccccca...230...tgtttgctagtaaatggtt	GTTGTaATTGTaCAG	Gttttata
E. Cab	tgagtgag	gcaagttccatc...210...tgtttgctagtaaatggtt	GTTGTaATTGTaCAG	Gttttata
S. Sus	tgagtgag	gcaagttccctc...230...tgtttgctagtaaatggtt	GTTGTaATTGTaCAG	Gttttata
O. Avi	tgagtgag	gcaagttccccca...230...tgtttgctagtaaatggtt	GTTGTaATTGTaCAG	Gttttata
L. Afr	tgagtgag	gcaagttctccc...238...catttgctagtaaatggtt	GTTGTaATTGTaCAG	Gttttata
		* ** ** *	* ** * ** * *	*****

id=226817 gene=ENSG00000096070 name=BRPF3 segment=chr6_36177693_36177977_1 type=IN

H. Sap	ccctttct	cttgccctgtgctgggcaggtccttcagccccttctgtcctcccttctc	CCTGGCAG	TggACAAc
R. Mac	ccctttct	cttgccctgtgctgggcaggtccttcagccccttctgtcctcccttctc	CCTGGCAG	TggACAAc
P. Tro	ccctttct	cttgccctgtgctgggcaggtccttcagccccttctgtcctcccttctc	CCTGGCAG	TggACAAc
P. Abe	ccctttct	cttgccctgtgctgggcaggtccttcagccccttctgtcctcccttctc	CCTGGCAG	TggACAAc
M. Mus	ccctttct	ctcaccctgtgctgggcaggccttcagcct-ccttctcctcattctc	CCTGGCAG	TggACAAc
R. Nor	ccctttct	ctcaccctgtgctgggcaggccttcagcctgcttctcctccca-tctc	CCTGGCAG	TggACAAc
C. Por	ccctttct	cttgccctggactgggcaggtccttcagccccttctgtcctcccttctc	CCTGGCAG	TggACAAc
O. Cun	ccctttct	cttgccctgggcaggcaggtccttcagccccttctgtcctcccttctc	CCTGGCAG	TggACAAc
C. Fam	ccctttct	cttgccctgggcaggcaggtccttcagccccttctgtcctcccttctc	CCTGGCAG	TggACAAc
F. Cat	ccctttct	cttgccctgggcaggcagacccttcag-ccttctgtcctcccttctc	CCTGGCAG	TggACAAc
B. Tau	ccctttct	ctttccctggcctgggcaggtccttcagccccttctgtcctcccttctc	CCTGGCAG	TggACAAc
E. Cab	ccctttct	cttgccctgggcaggcaggtccttcagccttctgtcctcccttctc	CCTGGCAG	TggACAAc
S. Sus	ccctttct	cttgccctgggcaggcaggtccttcagccccttctgtcctcccttctc	CCTGGCAG	TggACAAc
O. Avi	ccctttct	cttgccctgggcaggcaggtccttcagccccttctgtcctcccttctc	CCTGGCAG	TggACAAc
L. Afr	ccctttct	cttgccctgggcaggcaggtccttcagccccttctgtcctcccttctc	CCTGGCAG	TggACAAc
	**	** * * * *****	*****	*****

id=226822 gene=ENSG00000096070 name=BRPF3 segment=chr6_36178978_36179034_1 type=AN VIEW

Figure 467: CS=9



H.Sap	gctctgag	gtaacctttatt...3522..--gtttgcca--gtgatactggc	TCCTTGAAGGTCTTCT	TGCC	-tagcagactattcctcagag-...100...gtctgctggcag	ggaggaac
R.Mac	gctctgag	gtaacctttatt...3499..--gtttgcca--gtgatatctggc	TCCTTGAAGGTCTTCT	TGCC	-tagcagactattcctcagag-...100...gtctgctggcag	ggaggaac
P.Tro	gctctgag	gtaacctttatt...3498..--gtttgcca--gtgatactggc	TCCTTGAAGGTCTTCT	TGCC	-tagcagactattcctcagag-...100...gtctgctggcag	ggaggaac
C.Jac	gctctgag	gtaacctttatt...3537..--gtttgcca--gtgatatctggc	TCCTTGAAGGTCTTCT	TGCC	-tagcagactattcctcagag-...100...atctgctggcag	ggggaact
M.Mus	gttctgag	gtaactgattta...2907...----ttgccagtgtagctctggc	TCCTTGAAGGTCTTCT	TGCC	-tagcagactattcctcagag-...95...gtctgctggcag	ggaggaac
C.Por	cctctgag	gtaaccttgatt...2743..--gtttgcca--gtggcatctggc	TCCTTGAAGGTCTTCT	TGCC	-tagcagactattcctcagag-...101...gtctgctggcag	ggaggaac
O.Cun	gctctgag	gtaacctggatt...3016..--ctttgcca--gtgacgtctggc	TCCTTGAAGGTCTTCT	TGCC	-tagcagactattcctcagag-...98...gtctgctggcag	ggaggaac
C.Fam	gctctgag	gtaacctgatta...2558...ctgtttgcca--gtaacattgg	TCCTTGAAGGTCTTCT	TGCC	-tagcagactattcctcagag-...98...gtctgctggcag	ggaggaac
F.Cat	gctctgag	gtaaccttatgt...2537..--gtttgcca--gtaacagctggc	TCCTTGAAGGTCTTCT	TGCC	-tagcagactattcctcagag-...98...gtctgctggcag	ggaggaac
B.Tau	gctccgag	gtacccttgctt...3642..--gtttgcca--gtagcatctggc	TCCTTGAAGGTCTTCT	TGCC	-tagcagactattcctcagag-...98...gtctgctggcag	ggaggaac
E.Cab	gctctgag	gtaactgtgatt...2638...-tgtttgcca--gtaac-tctggc	TCCTTGAAGGTCTTCT	TGCC	-tagcagactattcctcagag-...98...gtctgctggcag	ggaggaac
S.Sus	gctctgag	gtaaccttgatt...3447..--gtttgcca--gtaacatctggc	TCCTTGAAGGTCTTCT	TGCC	-tagtagactattcctcagag-...98...gtctgctggcag	ggaggaac
O.Avi	gctctgag	gtacccttgctt...3639..--gtttgcca--gtagcatctggc	TCCTTGAAGGTCTTCT	TGCC	-tagcagactattcctcagag-...98...gtctgctggcag	ggaggaac
L.Afr	gctctgag	gtaaccttgatt...4810..--gtttgcca--gtgacatctggc	TCCTTGAAGGTCTTCT	TGCC	-ca-cagactattcctcagag-...93...gtctgctggcag	ggaggaac

** *** *** * ***** ** * ***** **** * ***** **** * ***** ** * ***** ** * *

id=394443 gene=ENSG00000115548 name=KDM3A segment=chr2.86684195.86687901.1 type=IN

H.Sap	gctggcag	ggaggaactattgccatgact	GGTAtAGAAGACCTTCAGGGA	aaactcttcag	gtaagaag
R.Mac	gctggcag	ggaggaactattgccatgact	GGTAtAGAAGACCTTCAGGGA	aaactcttcag	gtaagaag
P.Tro	gctggcag	ggaggaactattgccatgact	GGTAtAGAAGACCTTCAGGGA	aaactcttcag	gtaagaag
C.Jac	gctggcag	gg-ggaactattgccatgact	GGTAtAGAAGACCTTCAGGGA	aaactcttcag	gtaagaag
M.Mus	gctggcag	ggaggaactattgccatgact	GGTAtAGAAGACCTTCAGGGA	aaactcttcag	gtaagaag
C.Por	gctggcag	ggaggaactattgccatgact	GGTAtAGAAGACCTTCAGGGA	aaacccttcag	gtaagaag
O.Cun	gctggcag	ggaggaactattgccatgact	GGTAtAGAAGACCTTCAGGGA	aaactcttcag	gtaagaag
C.Fam	gctggcag	ggaggaactattgccatgact	GGTAtAGAAGACCTTCAGGGA	aaactcttcag	gtaagaag
F.Cat	gctggcag	ggaggaactattgccatgact	GGTAtAGAAGACCTTCAGGGA	aaactcttcag	gtaagaag
B.Tau	gctggcag	ggaggaactattgccatgact	GGTAtAGAAGACCTTCAGGGA	aaactcttcag	gtaagaag
E.Cab	gctggcag	ggaggaactattgccatgact	GGTAtAGAAGACCTTCAGGGA	aaactcttcag	gtaagaag
S.Sus	gctggcag	ggaggaactattgccatgact	GGTAtAGAAGACCTTCAGGGA	aaactcttcag	gtaagaag
O.Avi	gctggcag	ggaggaactattgccatgact	GGTAtAGAAGACCTTCAGGGA	aaactcttcag	gtaagaag
L.Afr	gctggcag	ggaggaactactgccagac	GGGAtAGAAGACCTTCAGGGA	aaactcttcag	gtaagaag

***** ** ***** ***** ** ***** ***** ***** ***** ***** ***** *****

id=394444 gene=ENSG00000115548 name=KDM3A segment=chr2.86687902.86687954.1 type=AN VIEW

Figure 468: CS=8.4



H. Sap	tcagcctt	ccTTGTATGTTGTTT	ctttataaatggttgagctg...32...atcattttaaag	aggaagct
R. Mac	tcagcctt	ccTTGTATGTTGTTT	ctttataaatggttgagctg...32...atcattttaaag	aggaagct
P. Tro	tcagcctt	ccTTGTATGTTGTTT	ctttataaatggttgagctg...32...atcattttaaag	aggaagct
P. Abe	tcagcctt	ccTTGTATGTTGTTT	ctttataaatggttgagctg...32...atcattttaaag	aggaagct
C. Jac	tcagcctt	ccTTGTATGTTGTTT	ctttataaatggttgagctg...32...atcattttaaag	aggaagct
M. Mus	tcagcctc	ccTTGTATGTTGTTT	ctttataaatggttgagctg...32...atcattttaaag	aggaagct
R. Nor	tcagcctt	ccTTGTATGTTGTTT	ctttataaatggttgagctg...31...aatcattttaaag	aggaagct
O. Cun	tcagcctt	ccTTGTATGTTGTTT	ctttataaatggttgagctg...32...atcattttaaag	aggaagct
C. Fam	tcagcctt	ccTTGTATGTTGTTT	ctttataaatggttgagctg...32...atcattttaaag	aggaagct
F. Cat	tcagcctt	ccTTGTATGTTGTTT	ctttataaatggttgagctg...33...tccattttaaag	aggaagct
B. Tau	tcagcctt	ccTTGTATGTTGTTT	ctttataaatggttgagctg...32...atcattttaaag	aggaagct
E. Cab	tcagcctt	ccTTGTATGTTGTTT	ctttataaatggttgagctg...32...atcattttaaag	aggaagct
S. Sus	tcagcctt	ccTTGTATGTTGTTT	ctttataaatggttgagctg...32...atcattttaaag	aggaagct
L. Afr	tcagcctt	ccTTGTATGTTGTTT	ctttataaatggttgagctg...32...atcattttaaag	aggaagct
*****		*****	*****	*****

id=68055 gene=ENSG00000134884 name=ARGLU1 segment=chr13.107209965.107210043.-1 type=AN

H. Sap	tcagcctt	ccttgatggtgtttctttataaatggttgagctgctgatgcaggtattgcc	AAGCtAACAgTACAA	atc-attttaaag	aggaagct
R. Mac	tcagcctt	ccttgatggtgtttctttataaatggttgagctgctgatgcaggtattgcc	AAGCtAACAgTACAA	atc-attttaaag	aggaagct
P. Tro	tcagcctt	ccttgatggtgtttctttataaatggttgagctgctgatgcaggtattgcc	AAGCtAACAgTACAA	atc-attttaaag	aggaagct
P. Abe	tcagcctt	ccttgatggtgtttctttataaatggttgagctgctgatgcaggtattgcc	AAGCtAACAgTACAA	atc-attttaaag	aggaagct
C. Jac	tcagcctt	ccttgatggtgtttctttataaatggttgagctgctgatgcaggtattgcc	AAGCtAACAgTACAA	atc-attttaaag	aggaagct
M. Mus	tcagcctc	ccttgatggtgtttctttataaatggttgagctgctgatgcaggtattgcc	AAGCtAACAgTACAA	atc-attttaaag	aggaagct
R. Nor	tcagcctt	ccttgatggtgtttctttataaatggttgagctgctgatgcaggtattgcc	AAGCtAACAgTACAA	atc--attttaaag	aggaagct
O. Cun	tcagcctt	ccttgatggtgtttctttataaatggttgagctgctgatgcaggtattgcc	AAGCtAACAgTACAA	atc-attttaaag	aggaagct
C. Fam	tcagcctt	ccttgatggtgtttctttataaatggttgagctgctgatgcaggtattgcc	AAGCtAACAgTACAA	atc-attttaaag	aggaagct
F. Cat	tcagcctt	ccttgatggtgtttctttataaatggttgagctgctgatgcaggtattgcc	AAGCtAACAgTACAA	atccattttaaag	aggaagct
B. Tau	tcagcctt	ccttgatggtgtttctttataaatggttgagctgctgatgcaggtattgcc	AAGCtAACAgTACAA	atc-attttaaag	aggaagct
E. Cab	tcagcctt	ccttgatggtgtttctttataaatggttgagctgctgatgcaggtattgcc	AAGCtAACAgTACAA	atc-attttaaag	aggaagct
S. Sus	tcagcctt	ccttgatggtgtttctttataaatggttgagctgctgatgcaggtattgcc	AAGCtAACAgTACAA	atc-attttaaag	aggaagct
L. Afr	tcagcctt	ccttgatggtgtttctttataaatggttgagctgctgatgcaggtattgcc	AAGCtAACAgTACAA	atc-attttaaag	aggaagct
*****		*****	*****	*****	*****

id=68055 gene=ENSG00000134884 name=ARGLU1 segment=chr13.107209965.107210043.-1 type=AN VIEW

Figure 469:



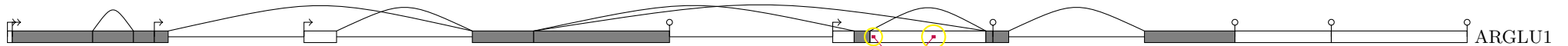
H. Sap	tcagcctt	ccttgatggtttctttataaatggttgagctgctgatgca	GGTATTGCCAAGcTAACAGtACAAat-cattttaaag	aggaagct
R. Mac	tcagcctt	ccttgatggtttctttataaatggttgagctgctgatgca	GGTATTGCCAAGcTAACAGtACAAat-cattttaaag	aggaagct
P. Tro	tcagcctt	ccttgatggtttctttataaatggttgagctgctgatgca	GGTATTGCCAAGcTAACAGtACAAat-cattttaaag	aggaagct
P. Abe	tcagcctt	ccttgatggtttctttataaatggttgagctgctgatgca	GGTATTGCCAAGcTAACAGtACAAat-cattttaaag	aggaagct
C. Jac	tcagcctt	ccttgatggtttctttataaatggttgagctgctgatgca	GGTATTGCCAAGcTAACAGtACAAat-cattttaaag	aggaagct
M. Mus	tcagcctc	ccttgatggtttctttataaatggttgagctgctgatgca	GGTATTGCCAAGcTAACAGtACAAat-cattttaaag	aggaagct
R. Nor	tcagcctt	ccttgatggtttctttataaatggttgagctgctgatgca	GGTATTGCCAAGcTAACAGtACAAat-cattttaaag	aggaagct
C. Por	tcagcctt	ccttgatggtttctttataaatggttgagctgctgatgca	GGTATTGCCAAGcTAACAGtACAAat-cattttaaag	aggaagct
O. Cun	tcagcctt	ccttgatggtttctttataaatggttgagctgctgatgca	GGTATTGCCAAGcTAACAGtACAAat-cattttaaag	aggaagct
C. Fam	tcagcctt	ccttgatggtttctttataaatggttgagctgctgatgca	GGTATTGCCAAGcTAACAGtACAAat-cattttaaag	aggaagct
F. Cat	tcagcctt	ccttgatggtttctttataaatggttgagctgctgatgca	GGTATTGCCAAGcTAACAGtACAAatcattttaaag	aggaagct
B. Tau	tcagcctt	ccttgatggtttctttataaatggttgagctgctgatgca	GGTATTGCCAAGcTAACAGtACAAat-cattttaaag	aggaagct
E. Cab	tcagcctt	ccttgatggtttctttataaatggttgagctgctgatgca	GGTATTGCCAAGcTAACAGtACAAat-cattttaaag	aggaagct
S. Sus	tcagcctt	ccttgatggtttctttataaatggttgagctgctgatgca	GGTATTGCCAAGcTAACAGtACAAat-cattttaaag	aggaagct
L. Afr	tcagcctt	ccttgatggtttctttataaatggttgagctgctgatgca	GGTATTGCCAAGcTAACAGtACAAat-cattttaaag	aggaagct

id=68055 gene=ENSG00000134884 name=ARGLU1 segment=chr13_107209965_107210043_-1 type=AN

H. Sap	acaagaca	gtaaatattcaa...110...-aatactatccagttttgtag	TTGTccTTGTTGaTTTGtGTGATATT	aaagtattagtaataattgc...227...cctccccttag	gaggaaga
R. Mac	acaagaca	gtaaatattcaa...110...-aatactatccagttttgtag	TTGTccTTGTTGaTTTGtGTGATATT	aaagtattagtaataattgc...227...cctccccttag	gaggaaga
P. Tro	acaagaca	gtaaatattcaa...110...-aatactatccagttttgtag	TTGTccTTGTTGaTTTGtGTGATATT	aaagtattagtaataattgc...227...cctccccttag	gaggaaga
P. Abe	acaagaca	gtaaatattcaa...110...-aatactatccagttttgtag	TTGTccTTGTTGaTTTGtGTGATATT	aaagtattagtaataattgc...227...cctccccttag	gaggaaga
C. Jac	acaagaca	gtaaatattcaa...110...-aatactatccagttttgtag	TTGTccTTGTTGaTTTGtGTGATATT	aaagtattagtaataattgc...227...cctccccttag	gaggaaga
M. Mus	acaagaca	gtaaactca...107...-aatactatccagttttgtag	TTGTccTTGTTGaTTTGtGTGATATT	aaagtattagtaataattgc...226...cctccccttag	gaggaaga
R. Nor	acaagaca	gtaaactca...107...-aatactatccagttttgtag	TTGTccTTGTTGaTTTGtGTGATATT	aaagtattagtaataattgc...227...cctccccttag	gaggaaga
C. Por	acaagaca	gtaaatattcaa...110...-aatactatccagttttgtag	TTGTccTTGTTGaTTTGtGTGATATT	aaagtattagtaataattat...226...cctccccttag	gaggaaga
O. Cun	acaagaca	gtaaatattcaa...110...-aatactatccagttttgtag	TTGTccTTGTTGaTTTGtGTGATATT	aaagtattagtaataattgc...226...cctccccttag	gaggaaga
C. Fam	acaagaca	gtaaatattcaa...109...-aatactatccagttttgtag	TTGTccTTGTTGaTTTGtGTGATATT	aaagtattagtaataattgc...227...cctccccttag	gaggaaga
F. Cat	acaagaca	gtaaatattcaa...110...-aatactatccagttttgtag	TTGTccTTGTTGaTTTGtGTGATATT	aaagtattagtaataattgc...227...cctccccttag	gaggaaga
B. Tau	acaagaca	gtaaatattcaa...109...-aatactatccagttttgtag	TTGTccTTGTTGaTTTGtGTGAtgtaaagtattagtagtaa---	234...cctccccttag	gaggaaga
E. Cab	acaagaca	gtaaatattcaa...109...-aatactatccag--tttgtag	TTGTccTTGTTGaTTTGtGTGATATT	aaagtattagtaataattac...227...cctccccttag	gaggaaga
S. Sus	acaagaca	gtaaatattcaa...110...-aatactatccagttttgtag	TTGTccTTGTTGaTTTGtGTGATATT	aaagtattagtaataattgc...227...cctccccttag	gaggaaga
L. Afr	acaagaca	gtaaatattcaa...110...-aatactatccagttttgtag	TTGTccTTGTTGaTTTGtGTGATATT	aaagtattagtaataattgc...226...cctccccttag	gaggaaga

id=68057 gene=ENSG00000134884 name=ARGLU1 segment=chr13_107209480_107209906_-1 type=AN VIEW

Figure 470:



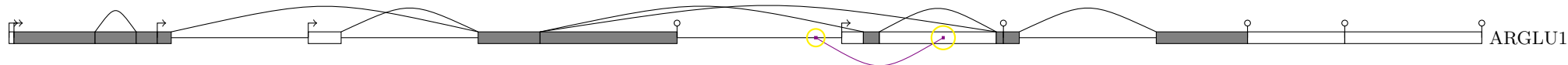
H. Sap	acaagaCA	GTAATA	ttCAACT	tTTAA	tgctgattaaggagtag-...376...cctccccttag	gaggaaga
R. Mac	acaagaCA	GTAATA	ttCAACT	tTTAA	tgctgattaaggagtag-...376...cctccccttag	gaggaaga
P. Tro	acaagaCA	GTAATA	ttCAACT	tTTAA	tgctgattaaggagtag-...376...cctccccttag	gaggaaga
P. Abe	acaagaCA	GTAATA	ttCAACT	tTTAA	tgctgattaaggagtag-...376...cctccccttag	gaggaaga
C. Jac	acaagaCA	GTAATA	ttCAACT	tTTAA	tgctgattaaggagtag-...376...cctccccttag	gaggaaga
C. Por	acaagaCA	GTAATA	ttCAACT	tTTAA	tgctgattaaggagtag-...376...cctccccttag	gaggaaga
D. Cun	acaagaCA	GTAATA	ttCAACT	tTTAA	tgctgattaaggagtag-...375...cctccccttag	gaggaaga
C. Fam	acaagaCA	GTAATA	ttCAACT	tTTAA	tgctgattaaggagtag-...375...cctccccttag	gaggaaga
F. Cat	acaagaCA	GTAATA	ttCAACT	tTTAA	tgctgattaaggagtag-...376...cctccccttag	gaggaaga
B. Tau	acaagaCA	GTAATA	ttCAACT	tTTAA	tgctgattaaggagtag-...376...cctccccttag	gaggaaga
E. Cab	acaagaCA	GTAATA	ttCAACT	tTTAA	tgctgattaaggagtag-...374...cctccccttag	gaggaaga
S. Sus	acaagaCA	GTAATA	ttCAACT	tTTAA	tgctgattaaggagtag-...376...cctccccttag	gaggaaga
L. Afr	acaagaCA	GTAATA	ttCAACT	tTTAA	tgctgattaaggagtag-...375...cctccccttag	gaggaaga
	*****	*****	*****	*****	*****	*****

id=68057 gene=ENSG00000134884 name=ARGLU1 segment=chr13_107209480.107209906_-1 type=AN

H. Sap	acaagaca	gtaaatattcaa...180...-aaactatcattagggagggt	TTAG	ttGGTTG	cTGT	TGGACTG	ggagggatgatttaaattta...160...cctccccttag	gaggaaga
R. Mac	acaagaca	gtaaatattcaa...180...-aaactatcattagggagggt	TTAG	ttGGTTG	cTGT	TGGACTG	ggagggatgatttaaattta...160...cctccccttag	gaggaaga
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Figure 471:



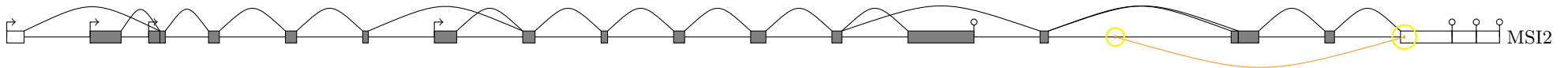
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Figure 472:



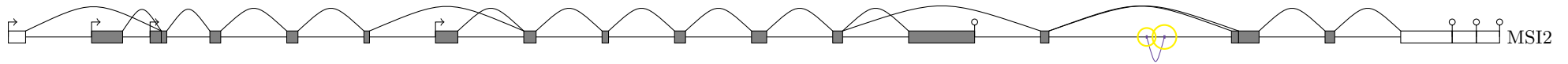
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Figure 473:



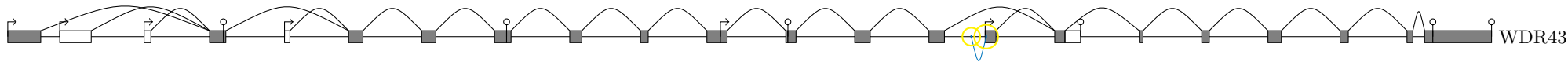
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Figure 474:



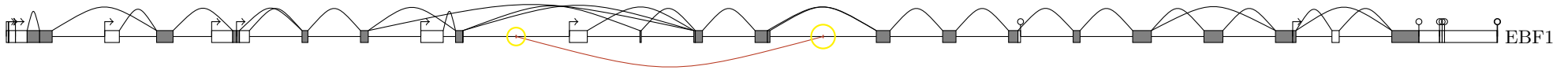
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B. Tau	ttctaaat	gtaagtattata...173...	agttatnttgaacctggaat	GCATTTTCT	CATAGAAA	atgttctgactgttact...87...	tttttctgtag	gaaaatgc
E. Cab	tgctaaat	gtaagtattaca...176...	aattatnttgaacctggaat	GCATTTTCT	CATAGAAA	atgttctgaattgttatt...87...	tttttctgtag	gaaaatgc
S. Sus	tgtaaat	gtaagtattata...171...	aattatnttgaacctggaat	GCATTTTCT	CATAGAAA	atgttctgaattattact...87...	tttttctgtag	gaaaatgc
L. Afr	tgtaaat	gtaagtattatg...184...	gttaatttaaacctggaat	GCATTTTCT	CATAGAAA	atgttctgaattgttatt...85...	tttttctgtag	gaaaatgc
	* ****	*****	**	* *****	*****	** * * *	** *****	*****

id=514142 gene=ENSG00000163811 name=WDR43 segment=chr2.29152577.29152923.1 type=IN

H. Sap	tgctaaat	gtaagtatatag...306...	tagatcacaatttatatntt	TTTCTGTAG	GAAaATGc
R. Mac	tgctaaat	gtaagtattag...306...	tagatcacaatttatatntt	TTTCTGTAG	GAAaATGc
P. Tro	tactaaat	gtaagtatatag...306...	tagatcacaatttatatntt	TTTCTGTAG	GAAaATGc
P. Abe	tgctaaat	gtaagtatatag...306...	tagatcacaatttatatntt	TTTCTGTAG	GAAaATGc
C. Jac	tgctaaat	gtaagtattata...303...	tagatcacaatttatatntt	TTTCTGTAG	GAAaATGc
M. Mus	tattaaac	gtaagtattgtg...273...	tagatcacaatttatatntt	TTTCTGTAG	GAAaATGc
R. Nor	tgtaaat	gtaagtatttct...284...	tagatcacaatttatatntt	TTTCTGTAG	GAAaATGc
C. Por	tgtaaat	gtaagtattact...292...	tagatcacaatttatatntt	TTTCTGTAG	GAAaATGc
O. Cun	tgctaaat	gtaagtattacg...291...	tagatcacaatttatatntt	TTTCTGTAG	GAAaATGc
C. Fam	tgctaaat	gtaagtattata...307...	tagatcacaatttatatntt	TTTCTGTAG	GAAaATGc
F. Cat	tgtaaat	gtaagtattata...308...	tagatcacaatttatatntt	TTTCTGTAG	GAAaATGc
B. Tau	ttctaaat	gtaagtattata...300...	tagatcacaatttatatntt	TTTCTGTAG	GAAaATGc
E. Cab	tgctaaat	gtaagtattaca...303...	tagatcacaatttatatntt	TTTCTGTAG	GAAaATGc
S. Sus	tgtaaat	gtaagtattata...298...	tagatcacaatttatatntt	TTTCTGTAG	GAAaATGc
L. Afr	tgtaaat	gtaagtattatg...309...	tagatcacaatttatatntt	TTTCTGTAG	GAAaATGc
	* ****	*****	*****	*****	*****

id=514142 gene=ENSG00000163811 name=WDR43 segment=chr2.29152577.29152923.1 type=IN VIEW

Figure 475: CS=9



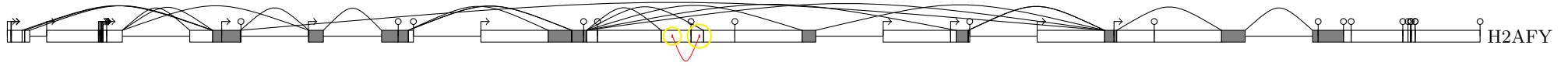
H. Sap	ttgacag	g	tagggaccactc...4516...taatgaggcagatataaaac	ACTTtgGAGAAAAA	-----ataatntagcatttttatag-----	...395...tttctctggtcg	tggsaatt	
R. Mac	ttgacag	g	tagggaccactc...4516...taatgaggcagatataaaac	ACTTtgGAGAAAAA	-----ataatntagcatttttatag-----	...395...tttctctggtcg	tggsaatt	
P. Tro	ttgacag	g	tagggaccactc...4516...taatgaggcagatataaaac	ACTTtgGAGAAAAA	-----ataatntagcatttttatag-----	...395...tttctctggtcg	tggsaatt	
P. Abe	ttgacag	g	tagggaccactc...4521...taatgaggcagatataaaac	ACTTtgGAGAAAAA	-----ataatntagcatttttatag-----	...390...tttctctggtcg	tggsaatt	
C. Jac	ttgacag	g	tagggaccactc...4515...taatgaggcagatataaaac	ACTTtGGAGAAAAAA	-----taatttagcatttttatagt-----	...394...tttctctggtcg	tggsaatt	
M. Mus	ttgacag	g	tagggaccactc...4502...taatgaggcagatataaaac	ACTTtGGAGAAAAA	-AtAATTTaaCATTTTTATGGT	tgctatagaacacctcagc...388...ttcctccagccg	tggsaatt	
R. Nor	ttgacag	g	tagggaccactc...4500...taatgaggcagatataaaac	ACTTtGGAGAAAAAA	AATTT	-----aacatttttatggttgctat-----	...403...ttcctccagccg	tggsaatt
C. Por	ttgacag	g	tagggaccactc...4498...taatgaggcagatataaaac	ACTTtGGAGAAAAA	-----ataatttaccatttttatag-----	...413...tttctctaatcg	tggsaatt	
O. Cun	ttgacag	g	tagggaccactc...4505...taatgaggcagatataaaac	ACTTtGGAGAAAAA	-AtAATTT	-----agcatttttatggttgctat-----	...399...tttctctagtcg	tggsaatt
C. Fam	ttgacag	g	tagggaccactc...4511...taatgaggcagatataaaac	ACTTtGGAGAAAAA	-----ataatntagcatttttatag-----	...400...tctctctagtcg	tggsaatt	
B. Tau	ttgacag	g	tagggaccactc...4509...taatgaggcagatataaaac	ACTTtGGAGAAAAA	-----ataatntagcatttttatagg-----	...402...tttctctagtcg	tggsaatt	
E. Cab	ttgacag	g	tagggaccactc...4502...taatgaggcagatataaaac	ACTTtGGAGAAAAA	-----ataatntagcatttttatag-----	...409...tttctctagtcg	tggsaatt	
S. Sus	ttgacag	g	tagggaccactc...4490...taataagcagataaaaaaac	ACTTtGGAGAAAAA	-AtAATTT	-----agcgtttttatagttgctat-----	...414...tttccctagtcg	tggsaatt
O. Avi	ttgacag	g	tagggaccactc...4502...taatgaggcagatataaaac	ACTTtGGAGAAAAA	-AtAATTT	-----agcatttttatagttgctat-----	...402...tttctctagtcg	tggsaatt
*****	*		*****	*****		* ** ** *	* * * **	*****

id=406207 gene=ENSG00000164330 name=EBF1 segment=chr5_158446138_158500402_-1 type=IN

H. Sap	ggaacatg	gtaggcgaatca...4880...	-----ataaaagatttttttttcc-----	TTTTTCTCAAGT	ct-tcatcattaaagtttgg...	..33..gttgaaaagcag	ctactccc		
R. Mac	ggaacatg	gtaggcgaatca...4880...	-----ataaaagatttttttttcc-----	TTTTTCTCAAGT	ct-tcatcattaaagtttgg...	..33..gttgaaaagcag	ctactccc		
P. Tro	ggaacatg	gtaggcgaatca...4880...	-----ataaaagatttttttttcc-----	TTTTTCTCAAGT	ct-tcatcattaaagtttgg...	..33..gttgaaaagcag	ctactccc		
P. Abe	ggaacatg	gtaggcgaatca...4880...	-----ataaaagatttttttttcc-----	TTTTTCTCAAGT	ct-tcatcattaaagtttgg...	..33..gttgaaaagcag	ctactccc		
C. Jac	ggaacatg	gtaggcgaatca...4874...	---gaaaagataaaagattttt	TTTT	ccTTTTTCTCAAGT	ct-tcatcattaaagtttgg...	..33..gttgaaaagcag	ctactccc	
M. Mus	ggaacatg	gtaggcgaatca...4850...	---gagatctggaggactttct	GTTAGTGAaaGATGaaAGATT	TTTTT	TTTTTCTCAAGT	ctccccatcattaaagtttgg...	..34..gttgaaaagcag	ctactccc
R. Nor	ggaacatg	gtaggcgaatca...4865...	..tctgttactaaaagataaa	AGATT	ttTTTTT	ccTTTTTCTCAAGT	ctccccatcattaaagtttgg...	..34..gttgaaaagcag	ctactccc
C. Por	ggaacatg	gtaggcgaatca...4879...	-----ataaaagatgtattttttc-----	TTTTTCTCAAGT	ctccccatcattaaagtttgg...	..34..gttgaaaagcag	ctactccc		
O. Cun	ggaacatg	gtaggcgaatca...4866...	..tctgttagtgaaaagataaa	AGATT	ttTTTTT	cTTTTTCTCAAGT	cgccccatcattaaagtttgg...	..34..gttgaaaagcag	ctactccc
C. Fam	ggaacatg	gtaggcgaatca...4880...	-----aaaagatatttttttttcc-----	TTTTTCTCAAGT	ct-ccatcattaaagtttgg...	..33..gttgaaaagcag	ctactccc		
B. Tau	ggaacatg	gtaggcgaatca...4879...	-----ataaaagatttttttttcc-----	TTTTTCTCAAGT	ctccccatcattaaagtttgg...	..34..gttgaaaagcag	ctactccc		
E. Cab	ggaacatg	gtaggcgaatca...4879...	-----ataaaagatttttttttcc-----	TTTTTCTCAAGT	ctccccatcattaaagtttgg...	..34..gttgaaaagcag	ctactccc		
S. Sus	ggaacatg	gtaggcgaatca...4866...	..tctgtcgtgaaaagataaa	AGATT	ttTTTTT	cTTTTTCTCAAGT	ctccccatcattaaagtttgg...	..34..gttgaaaagcag	ctactccc
O. Avi	ggaacatg	gtaggcgaatca...4866...	..tccgttcgtaaaaagataaa	AGATT	ttTTTTT	cTTTTTCTCAAGT	ctccccatcattaaagtttgg...	..34..gttgaaaagcag	ctactccc
*****	*	*****	*			*****	*****	*****	

id=406217 gene=ENSG00000164330 name=EBF1 segment=chr5_158223484_158250183_-1 type=IN VIEW

Figure 476: CS=4.2



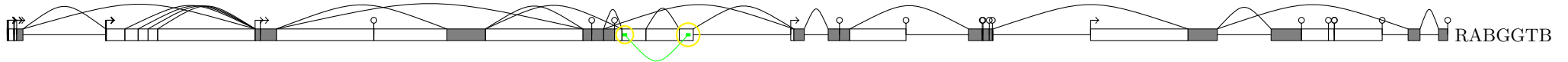
H. Sap	attttcag	ccg-ccccagtga...36...caattcacttttattgaaaa	TAAAAATGATGCA	aaggcttttaagacctgaga...108...--ttgacgttccaa	gttaatct
R. Mac	attttcag	ccg-ccccagtga...36...tgattcacttttattgaaaa	TAAAAATGATGCA	aaggcttttaagacctgaga...109...--ttgacctccaa	gttaatct
P. Tro	attttcag	ccg-ccccagtga...36...caattcacttttattgaaaa	TAAAAATGATGCA	aaggcttttaagacctgaga...108...--ttgacctccaa	gttaatct
P. Abe	attttcag	ccg-ccccagtga...36...caattcacttttattgaaaa	TAAAAATGATGCA	aaggcttttaagacctgaga...109...--ttgacctccaa	gttaatct
C. Jac	attttcag	ccg-ccccagtga...37...cgattcacttttattgaaaa	TAAAAATGATGCA	aaggcttttaagaactgaga...105...--ttgacttccaa	gttaatct
M. Mus	attttcag	cca-ccccagtga...36...tgattcactcttattgaaa	TAAAAATGATGCA	aaggcttttaagacctggaa...74...--gaatctggccct	gccgatcc
C. Por	attttcag	cca-tcccagtga...36...tgattcacttgattgaaaa	TAAAAATGATGCA	aaggcttttaagacctggaa...102...--ttgacctccat	gcaaattt
O. Cun	attttcag	cca-ccccagtga...36...tgattcacttctattgaaaa	TAAAAATGATGCA	aaggcttttaagacctgaca...109...--ttgacctgccat	gtacattt
C. Fam	attttcag	cca-tcccagtga...36...tgattcacttttctgtaaaa	TAAAAATGATGCA	aaggcttttaagacctgaga...121...--ttgacctccat	gtaaattg
F. Cat	attttcag	cca-tcccagtga...36...tgattcacttttgttgaaaa	TAAAAATGATGCA	aaggcttttaagacctgaga...151...atgtgacctt-cat	gtaaact-
E. Cab	attttcag	ctg-ccccagtga...36...tgattcacttttgttgaaaa	TAAAAATGATGCA	aagccgcttaagaactgaga...113...--ttgacctccct	gtcaattt
S. Sus	gttttcag	cctccccagtg...37...cggttcaactttgttgaaaa	TAAAAATGATGCA	aaggcttttaagacctgaga...267...--ttgacttgccat	ataaattg
L. Afr	attttcag	cca-ccccagtga...36...tgatttgccttttattgaaaa	TAAAAATGATGCA	aaggcttttaagacctgaga...112...atgtgacctt-cat	gtaaatt-
	*****	* *****	** ** * ** *****	* ***** ** *	* * *

id=22753 gene=ENSG00000113648 name=H2AFY segment=chr5_134695412_134695632_-1 type=AN

H. Sap	-cgttccaa	gttaatctgtgttagtttagttgagtggtgtaacaaacttggatctgaagc	TGCATCATTTTTA	aacctcactgtcaa-tttcttttgcacac-ag	tgacacgg
R. Mac	-ccttccaa	gttaatctgtgttagtttagttgagtggtgtaacaaacttggatctgaagc	TGCATCATTTTTA	aacctcactgtcaa-tttcttttgcacac-ag	tgacacgg
P. Tro	-ccttccaa	gttaatctgtgttagtttagttgagtggtgtaacaaacttggatctgaagc	TGCATCATTTTTA	aacctcactgtcaa-tttcttttgcacac-ag	tgacacgg
P. Abe	-ccttccaa	gttaatctgtgttagtttagttgagtggtgtaacaaacttggatctgaagc	TGCATCATTTTTA	aacctcactgtcaa-tttcttttgcacac-ag	tgacacgg
C. Jac	-cttccaa	gttaatctgtgttagtttagttgagtggtgtaacaaacttggatctgaagc	TGCATCATTTTTA	aacctcactgtcaa-tttcttttgcacac-ag	tgacacgg
M. Mus	-ctggccct	gccgatccgt--tggttaaaaggtgctctgcg--ttgggttagaagc	TGCATCATTTTTA	cctcctcactgtcctgtccttttgcacac-ga	tgacacgg
C. Por	-ccttccat	gcaaatttgttt-----aaagataatagtaacatgattcagaagc	TGCATCATTTTTA	agctcctcactgtcaattttcttttgcacac-ag	tgacacaa
O. Cun	-cctgccat	gtacatttgtgttcagtttgaatgtggtaac-aacttggttctgaagc	TGCATCATTTTTA	aatcgtcactgtcaatttcttctgcacac-ag	cgacctgt
C. Fam	-ccttccat	gtaaa-ttgccg-----tgtggccaacaacttggttctgaagc	TGCATCATTTTTA	caacctcactgtcaattttcttctgcacac-ag	tgacacag
F. Cat	gaccttcat	gtaaa-ctgctg-----tgtggccaacaacttggttctgaagc	TGCATCATTTTTA	caacctcactgtcaattttcttctgcacac-ag	tgacacag
E. Cab	-ccttccct	gtcaa-ttttctagttttagttggttaacaacttggttctgaagc	TGCATCATTTTTA	aaacctcactgtcaattttcttctgcacac-ag	tgacacgg
S. Sus	-ccttccat	ataaa-ttggtttagttttagttggttagcaacttggttctgaagc	TGCATCATTTTTA	caacctcactgtcaattttcttctgcacac-ag	tgacacag
L. Afr	gaccttcat	gtaaa-ttggtttagttttagttggttagcaacttggttccaagc	TGCATCATTTTTA	aatcctcactgtcaattttcttctgcacac-ag	tgacacag
	*	*	** * *****	* ** ** * ** * ** *	*** *

id=22754 gene=ENSG00000113648 name=H2AFY segment=chr5_134695319_134695411_-1 type=AN VIEW

Figure 477: CS=10.14



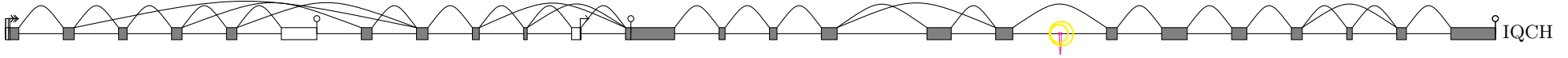
H. Sap	--cTTTTCaG	GTCCCActAAGCAGCTGGTCTaaCTGG	agtta-atggtctgctggaac...64...ctaaaagataag	gtaggtgg
R. Mac	--cTTTTCaG	GTCCCActAAGCAGCTGGTCTaaCTGG	agtta-atggtctgctggaac...62...ctaaaagataag	gtaggtgg
P. Tro	--cTTTTCaG	GTCCCActAAGCAGCTGGTCTaaCTGG	agtta-atggtctgctggaac...64...ctaaaagataag	gtaggtgg
P. Abe	--cTTTTCaG	GTCCCActAAGCAGCTGGTCTaaCTGG	agtta-atggtctgctggaac...62...ctaaaagataag	gtaggtgg
C. Jac	--cTTTTCaG	GTCCCActAAGCAGCTGGTCTaaCTGG	agtta-atggtctgctggaac...62...ctaaaagataag	gtaggtga
M. Mus	ctt--TTCaG	GTCCCActAAGCAGCTGGTCTaaCTGG	agtta-atggtctgctggaac...62...ctaaaagataag	gtaggttc
R. Nor	ctt--TTCaG	GTCCCActAAGCAGCTGGTCTaaCTGG	agtta-atggtctgctggaac...62...ctaaaagataag	gtaggtcc
C. Por	--cTTTTCaG	GTCCCActAAGCAGCTGGTCTaaCTGG	agtta-atggtctgctggaac...62...ctaaaagataag	gtaggtga
O. Cun	--tTTTTCaG	GTCCCAcGAAGCAGCTGGTCTaaITGG	agtta-atggtctgctggaag...62...ctaaaagataag	gtaggtga
C. Fam	--cTTTTCaG	GTCCCActAAGCAGCTGGTCTaaCTGG	agtta-atggtctgctggaac...62...ctaaaagataag	gtaggtga
B. Tau	--tTTTTCaG	GTCCCActAAGCAGCTGGTCTaaCTGG	agtta-atggtctgctggaag...62...ctaaaagataag	gtaggtga
E. Cab	--tTTTTCaG	GTCCCActAAGCAGCTGGTCTaaCTGG	agtta-atggtctgctggaag...62...ctaaaagataag	gtaggtgt
S. Sus	--cTTTTCaG	GTCCCActAAGCAGCTGGTCTaaCTGG	agtta-atggtctgctggaag...62...ctaaaagataag	gtaggtga
O. Avi	--tTTTTCaG	GTCCCActAAGCAGCTGGTCTaaCTGG	agtta-atggtctgctggaag...62...ctaaaagataag	gtaggtga
L. Afr	--cTTTTCaG	GTCCCActAAGCAGCTGGTCTaaCTGG	agtta-atggtctgctggaag...62...ctaaaagataag	gtaggtta
	****	*****	*****	*****

id=718484 gene=ENSG00000137955 name=RABGGTB segment=chr1_76255837_76255959_1 type=AN

H. Sap	tgctttag	ggatgaacacagtgagg--CCAGagAGACCAGCTGCTTcaTGGGATgTGAAAA	atctactt--ttataaa-gtagg	gtaagttt
R. Mac	tgctttag	ggatgaacacagtgagg--CCAGagAGACCAGCTGCTTcaTGGGATgTGAAAA	atctactt--ttataaa-gtagg	gtaagttt
P. Tro	tgctttag	ggatgaacacagtgagg--CCAGagAGACCAGCTGCTTcaTGGGATgTGAAAA	atctactt--ttataaa-gtagg	gtaagttt
P. Abe	tgctttag	ggatgaacacagtgagg--CCAGagAGACCAGCTGCTTcaTGGGATgTGAAAA	atctactt--ttataaa-gtagg	gtaagttt
C. Jac	tgctttag	ggatgaacacagtgagg--CCAGagAGACCAGCTGCTTcaTGGGATgTGAAAA	atctactt--ttataaa-gtagg	gtaagttt
M. Mus	taactctgg	gggggaaacaaatgcagtcctg--AGACCAGCTGCTTgTGAAAA	atctactt--ttataaa-gtagg	gtaagttt
R. Nor	tgcttttag	ggatgaacacagtgagg--CCAGagAGACCAGCTGCTTcaTGGGATgTGAAAA	atctactt--ttataaa-gtagg	gtaagttt
C. Por	tgcttttag	ggatgaacacagtgagg--CCAGagAGACCAGCTGCTTcaTGGGATgTGAAAA	atctactt--ttataaa-gtagg	gtaagttt
O. Cun	tgcttttag	ggatgaacacagtgagg--CCAGagAGACCAGCTGCTTcaTGGGATgTGAAAA	atctactt--ttataaa-gtagg	gtaagttt
C. Fam	tgcttttag	ggatgaacacagtgagg--CCAGagAGACCAGCTGCTTcaTGGGATgTGAAAA	atctactt--ttataaa-gtagg	gtaagttt
B. Tau	tgcttttag	ggatgaacacagtgagg--CCAGagAGACCAGCTGCTTcaTGGGATgTGAAAA	atctactt--ttataaa-gtagg	gtaagttt
E. Cab	tgcttttag	ggatgaacacagtgagg--CCAGagAGACCAGCTGCTTcaTGGGATgTGAAAA	atctactt--ttataaa-gtagg	gtaagttt
S. Sus	tgcttttag	ggatgaacacagtgagg--CCAGagAGACCAGCTGCTTcaTGGGATgTGAAAA	atctactt--ttataaa-gtagg	gtaagttt
O. Avi	tgcttttag	ggatgaacacagtgagg--CCAGagAGACCAGCTGCTTcaTGGGATgTGAAAA	atctactt--ttataaa-gtagg	gtaagttt
L. Afr	tgcttttag	ggatgaacacagtgagg--CCAGagAGACCAGCTGCTTcaTGGGATgTGAAAA	atctactt--ttataaa-gtagg	gtaagttt
	***	***	***	***

id=718486 gene=ENSG00000137955 name=RABGGTB segment=chr1_76256131_76256202_1 type=AN VIEW

Figure 478:



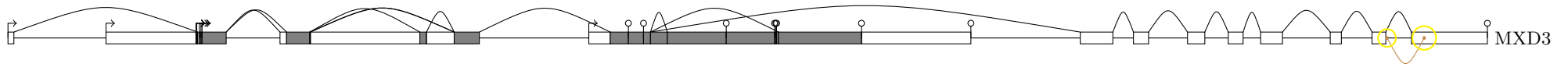
H. Sap	gggcacaa	gtgagtattcaa...	4894...	aggcctggttttaatcact	CCACAAGCAGTTTT	catttctgtagtaaaattgctt	gtggttctatttaattg	tgttctgcag	gagccagc
R. Mac	gggcacaa	gtgagtattcaa...	4894...	aggcctggttttaatcact	CCACAAGCAGTTTT	catttctgtagtaaaattgctt	gtggttctatttaattg	tgttctgcag	gagccagc
P. Tro	gggcacaa	gtgagtattcaa...	4894...	aggcctggttttaatcact	CCACAAGCAGTTTT	catttctgtagtaaaattgctt	gtggttctatttaattg	tgttctgcag	gagccagc
P. Abe	gggcacaa	gtgagtattcaa...	4894...	aggcctggttttaatcact	CCACAAGCAGTTTT	catttctgtagtaaaattgctt	gtggttctatttaattg	tgttctgcag	gagccagc
C. Jac	gggcacaa	gtgagtattcat...	4894...	aggcctggttttaatcact	CCACAAGCAGTTTT	catttctgtagtaaaattgctt	gtggttctatttaattg	tgttctgcag	gagccagc
M. Mus	gggcacaa	gtgagtgttcag...	4894...	aggcctggttttaatcact	CCACAAGCAGTTTT	catttctgtagtaaaattgctt	gtggttctatttaattg	tgttctgcag	gagtcagc
R. Nor	gggcacaa	gtgagtgttcag...	4894...	aggcctggttttaatcact	CCACAAGCAGTTTT	catttctgtagtaaaattgctt	gtggttctatttaattg	tgttctgcag	gagtcagc
C. Por	gggcacat	gtgagtgtttag...	4894...	aggcctggttttaatcact	CCACAAGCAGTTTT	catttctgtagtaaaattgctt	gtggttctatttaattg	tgttctgcag	gagccagc
O. Cun	gggcacag	gtgagagaccgg...	4894...	aggcctggttttaatcact	CCACAAGCAGTTTT	catttctgtagtaaaattgctt	gtggttctatttaattg	tgttctgcag	gagccggc
C. Fam	gggcacag	gtgagttgatg...	4894...	aggcctggttttaatcact	CCACAAGCAGTTTT	catttctgtagtaaaattgctt	gtggttctatttaattg	tgttctgcag	gagccagc
F. Cat	gggcacaa	gtgagtgttcaa...	4894...	aggcctggttttaatcact	CCACAAGCAGTTTT	catttctgtagtaaaattgctt	gtggttctatttaattg	tgttctgcag	gagccagc
B. Tau	gggcacaa	gtgagtgttcaa...	4894...	aggcctggttttaatcact	CCACAAGCAGTTTT	catttctgtagtaaaattgctt	gtggttctatttaattg	tgttctgcag	gagccagc
E. Cab	gggcacaa	gtgagtgttcaa...	4894...	aggcctggttttaatcact	CCACAAGCAGTTTT	catttctgtagtaaaattgctt	gtggttctatttaattg	tgttctgcag	gagccagc
O. Avi	gggcacaa	gtgagtattcag...	4894...	aggcctggttttaatcact	CCACAAGCAGTTTT	catttctgtagtaaaattgctt	gtggttctatttaattg	tgttctgcag	gagccagc
L. Afr	gggcacaa	gtaagtgttcaa...	4894...	aggcctggttttaatcact	CCACAAGCAGTTTT	catttctgtagtaaaattgctt	gtggttctatttaattg	tgttctgcag	gagccagc
	**** **	** **		*****		*****		*****	*** * **

id=595870 gene=ENSG00000103599 name=IQCH segment=chr15.67692644.67709268.1 type=IN

H. Sap	gggcacaa	gtgagtattcaa...	4920...	gcagttttcatttctgtagt	AAAATTGCTTGTGG	ttctatttaattg	tgttctgcag	gagccagc	
R. Mac	gggcacaa	gtgagtattcaa...	4920...	gcagttttcatttctgtagt	AAAATTGCTTGTGG	ttctatttaattg	tgttctgcag	gagccagc	
P. Tro	gggcacaa	gtgagtattcaa...	4920...	gcagttttcatttctgtagt	AAAATTGCTTGTGG	ttctatttaattg	tgttctgcag	gagccagc	
P. Abe	gggcacaa	gtgagtattcaa...	4920...	gcagttttcatttctgtagt	AAAATTGCTTGTGG	ttctatttaattg	tgttctgcag	gagccagc	
C. Jac	gggcacaa	gtgagtattcat...	4920...	gcagttttcatttctgtagt	AAAATTGCTTGTGG	ttctatttaattg	tgttctgcag	gagccagc	
M. Mus	gggcacaa	gtgagtgttcag...	4920...	gcagttttcatttctgtagt	AAAATTGCTTGTGG	ttctatttaattg	tgttctgcag	gagtcagc	
R. Nor	gggcacaa	gtgagtgttcag...	4920...	gcagttttcatttctgtagt	AAAATTGCTTGTGG	ttctatttaattg	tgttctgcag	gagtcagc	
C. Por	gggcacat	gtgagtgtttag...	4920...	gcagttttcatttctgtagt	AAAATTGCTTGTGG	ttctatttaattg	tgttctgcag	gagccagc	
O. Cun	gggcacag	gtgagagaccgg...	4920...	gcagttttcatttctgtagt	AAAATTGCTTGTGG	ttctatttaattg	tgttctgcag	gagccggc	
C. Fam	gggcacag	gtgagttgatg...	4920...	gcagttttcatttctgtagt	AAAATTGCTTGTGG	ttctatttaattg	tgttctgcag	gagccagc	
F. Cat	gggcacaa	gtgagtgttcaa...	4920...	gcagttttcatttctgtagt	AAAATTGCTTGTGG	ttctatttaattg	tgttctgcag	gagccagc	
B. Tau	gggcacaa	gtgagtattcaa...	4920...	gcagttttcatttctgtagt	AAAATTGCTTGTGG	ttctatttaattg	tgttctgcag	gagccagc	
E. Cab	gggcacaa	gtgagtgttcaa...	4920...	gcagttttcatttctgtagt	AAAATTGCTTGTGG	ttctatttaattg	tgttctgcag	gagccagc	
O. Avi	gggcacaa	gtgagtattcag...	4920...	gcagttttcatttctgtagt	AAAATTGCTTGTGG	ttctatttaattg	tgttctgcag	gagccagc	
L. Afr	gggcacaa	gtaagtgttcaa...	4920...	gcagttttcatttctgtagt	AAAATTGCTTGTGG	ttctatttaattg	tgttctgcag	gagccagc	
	**** **	** **		*****		*****		*****	*** * **

id=595870 gene=ENSG00000103599 name=IQCH segment=chr15.67692644.67709268.1 type=IN VIEW

Figure 480: CS=9



```

H. Sap   cctgccag acgagctcttcagaaaagtggcagaggattacgtcagtggtgccttccaGGTGATGACAGgTGTGtgc
R. Mac   cctgccag acgagctcttcagaaaagtggcagaggattacgtcagtggtgccttccaGGTGATGACAGgTGTGtgc
P. Tro   cctgccag acgagctcttcagaaaagtggcagaggattacgtcagtggtgccttccaGGTGATGACAGgTGTGtgc
P. Abe   cctgccag acgagctcttcagaaaagtggcagaggattacgtcagtggtgccttccaGGTGATGACAGgTGTGtgc
C. Jac   cctgccag atgagctcttcagaaaagtggcagaggattacgtcagtggtgccttccaGGTGATGACAGgTGTGtgc
C. Por   cctgccag acgagctcttcagaaaagtggcagaggattacgtcagtggtgccttccaGGTGATGACAGgTGTGtgc
O. Cun   cctgtcag acgagctcttcagaaaagtggcagaggattacgtcagtcagcgtggctgccttccaaGTGATGACAGgTGTGtgc
C. Fam   cctgccag acgagctcttcagaaaagtggcagaggattacgtcagtggtgccttccaGGTGATGACAGgTGTGtgc
F. Cat   cctgccag acgagctcttcagaaaagtggcagaggattacgtcagtggtgccttccaGGTGATGACAGgTGTGtgc
B. Tau   cctgccag acgagctcttcagaaaagtcgagaggattacgtcagtggtgccttccaGGTGATGACAGgTGTGtgc
E. Cab   cctgccag acgagctcttcagaaaagtggcagaggattacgtcagtggtgccttccaGGTGATGACAGgTGTGtgc
S. Sus   cctgccag acgagctcttcagaaaagtggcagaggattacgtcagtggtgccttccaGGTGATGACAGgTGTGtgc
L. Afr   cctgccag acgagctcttcagaaaagtggcagaggattacgtcagtggtgccttccaGGTGATGACAGgTGTGtgc
**** ** * ***** ** ** ***** ***** ***** ***** *****

```

id=126587 gene=ENSG00000213347 name=MXD3 segment=chr5_176728926_176728988_-1 type=EN

```

H. Sap   tttgaca---g aggacaagggcgtggatctgggccagaagcacaaccctacttcTACAgCTGTTGTCATCactgagtcagcactcacctg...255...aatcagtcactgtgcatca
R. Mac   tttgaca---g aggacaagggcgtggatctgggccagaagcacaaccctacttcTACAgCTGTTGTCATCactgagtcagcactcacctg...257...aatgaatgactgtgaatca
P. Tro   tttgaca---g aggacaagggcgtggatctgggccagaagcacaaccctacttcTACAgCTGTTGTCATCactgagtcagcactcacctg...256...aatcaatgactgtgaatca
P. Abe   tttgacagagg aggacaagggcgtggatctgggccagaagcacaaccctacttcTACAgCTGTTGTCATCactgagtcagcactcacctg...256...aatcaatgactgtgaatca
C. Jac   tttgaca---g aggacaagggcgtggactctgggccagaagcacaaccctacttcTACAgCTGTTGTCATCactgattcaccactcacctg...257...aatcaatgactgtgaatca
C. Por   tttgaca---g aggacaagggcgtggactctgggccagaagcacaaccctacttcTACAgCTGTTGTCATCactgaggcaccactaacctg...242...aaccaatgactatgaatta
O. Cun   tttcaca---g aggacaagggcgtggatctgggccagaagcacaaccctacttcTACAgCTGTTGTCATCactgactcgcactcacct...254...agtcagtcactgtgactca
C. Fam   tttgaca---g aggacaagggcgtggactctgggccagaagcacaaccctacttcTACAgCTGTTGTCATCactgagacaccactcac...260...aatcagtcactgtgaatca
F. Cat   tttgaca---g aggacaagggcgtggactctgggccagaagcacaaccctacttcTACAgCTGTTGTCATCactgagtcaccaccgctcag...277...aatcaatgactgtgaatca
B. Tau   tttgaca---g aggacaagggcgtggactctgggccagaagcacaaccctacttcTACAgCTGTTGTCATCactgagtcaccactcacttg...249...aatcaatgactgtgaatca
E. Cab   tctaaca---g aggacaagggcgtggactctgggccagaagcacaaccctatcttTACAgCTGTTGTCATCactgagtcactcactcatctg...258...aatcaatgactgtgaatct
S. Sus   tttgaca---g aggacaagggagtgactctgggccagaagcacaaccctacttcTACAgCTGTTGTCACCactgagtcaccactcacctg...247...aatcaatgactgtgaatca
L. Afr   tttgaca---g aggacaagggcgtggactctgggccagaagcacaatcctacttcTACAgCTGTTGTCATCactgagtcaccaccaccta...254...aatcaatgactgtgaatca
* * ** * ***** ***** ***** ***** ** ***** ***** * ** * ***** ** *

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id=126589 gene=ENSG00000213347 name=MXD3 segment=chr5_176728462_176728808_-1 type=EN VIEW

Figure 481: CS=3.9



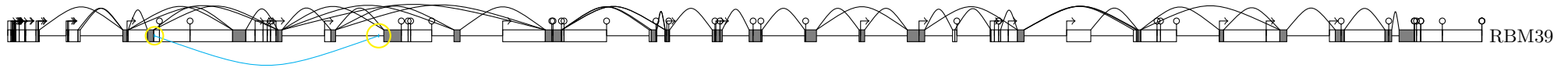
H. Sap	tccagtga	actcgagctggg...2216...-tatatgtttaaatatctgtct	TTTGAAATGC	-----	AGAAATAGTTT	aaatgtttcctt	----gtctattt...278...aacagaaatgc	acaatacc
R. Mac	tccagtga	actcgagcggg...2222...-tatatgtttaaatatctgtct	TTTGAAATGC	-----	AGAAATAGTTT	aaatgtttcctt	----gtctattt...278...aacagaaatgc	acaatacc
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P. Abe	tccagtga	actcgagcggg...2208...-tatatgtttaaatatctgtct	TTTGAAATGC	-----	AGAAATAGTTT	aaatgtttcctt	----gtctattt...277...aacagaaatgc	acaatacc
C. Jac	tccagtga	actcgagcgtgg...2211...-tatatgtttaaatatctgtct	TTTGAAATGC	-----	AGAAATAGTTT	aaatgtttcctt	----gtctattt...279...aacagaaatgc	acaatacc
M. Mus	tccagtga	actcaagcggg...2227...-tatatgtttaaatatctgtct	TTTGAAATGC	-----	AGAAATAGTTT	aaatgtttcctt	----gtctattt...283...aacagaaatgc	acaatacc
R. Nor	tccagtga	actcaagcagg...2322...-tatatgtttaaatatctgtct	TTTGAAATGC	-----	AGAAATAGTTT	aaatgtttcctt	----gtctattt...281...aacagaaatgc	acaatacc
C. Por	tccagtga	actcgagcggg...2225...ttgtctattt-ttttctttt	TTT-AAAGCTA	cc	CAGGGAAATATTTCA	-tatcattttaagtgccctg	--...219...aacagaaatgc	acaatacc
O. Cun	tccagtga	actcgagcgtgg...2272...-tatatgtttaaatatctgtct	TTTGAAATGC	-----	AGAAATAGTTT	aaatgtttcctt	----gtctattt...280...aacagaaatgc	acaatacc
C. Fam	tccagtga	actcgagcggg...2269...-tatatgtttaaatatctgtct	TTTGAAATGC	-----	AGAAATAGTTT	aaatgtttcctt	----gtctattt...283...aacagaaatgc	acaatacc
B. Tau	tccagtga	actcgagcggg...2292...-tatatgtttaaatatctgtct	TTTGAAATGC	-----	AGAAATAGTTT	aaatgtttcctt	----gtctattt...279...aacagaaatgc	acaatacc
E. Cab	tccagtga	actcgagcagg...2195...-tatatgtttaaatatctgtct	TTTGAAATGC	-----	AGAAATAGTTT	aaatgtttcctt	----gtctattt...278...aacagaaatgc	acaatacc
S. Sus	tccagtga	actcgagcggg...2256...-tatatgtttaaatatctgtct	TTTGAAATGC	-----	AGAAATAGTTT	aaatgtttcctt	----gtctattt...280...aacagaaatgc	acaatacc
O. Avi	tccagtga	actcgagcggg...2265...-tatatgtttaaatatctgtct	TTTGAAATGC	-----	AGAAATAGTTT	aaatgtttcctt	----gtctattt...278...aacagaaatgc	acaatacc
L. Afr	tccagtga	actcgagcggg...2208...-tatgtttaaatatctgtct	TGAAATGC	-----	AGAAATAGTTT	aaatgtttcctt	----gtctattt...274...aacagaaatgc	acaatacc
	*****	**** * *			*****	*** * * *	*****	*****

id=155413 gene=ENSG0000184486 name=POU3F2 segment=chr6_99284082_99286660_1 type=E3

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R. Mac	tccagtga	actcgagcggg...2361...---ttgaagcaaaaagggtctgg	AAACTG	-Ttt	TTCTGTAgcTTTAAAt	gaataggtgagcaaatct...136...aacagaaatgc	acaatacc	
P. Tro	tccagtga	actcgagctggg...2359...---ttgaacaaaaagggtctgg	AAACTG	-Ttt	TTCTGTAgcTTTAAAt	gaataggtgagcaaatct...135...aacagaaatgc	acaatacc	
P. Abe	tccagtga	actcgagcggg...2347...---ttgaacaaaaagggtctgg	AAACTG	-Ttt	TTCTGTAgcTTTAAAt	gaataggtgagcaaatct...135...aacagaaatgc	acaatacc	
C. Jac	tccagtga	actcgagcgtgg...2350...---ttgaagcaaaaagggtctgg	AAACTG	-Ttt	TTCTGTAgcTTTAAAt	gaataggtgagcaaatct...137...aacagaaatgc	acaatacc	
M. Mus	tccagtga	actcaagcggg...2371...---ttggagcaaaaagggtctga	AAACTG	-gt	TTTCTGTAgcTTTAAAt	gagtaggt-agcaagatcta...136...aacagaaatgc	acaatacc	
R. Nor	tccagtga	actcaagcagg...2465...---gagaaaaaaaagggtctga	AAACTG	-gt	TTTCTGTAgcTTTAAAt	gagtaggt-agcaagatcta...135...aacagaaatgc	acaatacc	
C. Por	tccagtga	actcgagcggg...2311...cttttgaagcaaa-agcttct	TGAAACTGTTT	TTCTGTAGC	TTTAAAt	gagtaggtgagcaaatct...134...aacagaaatgc	acaatacc	
O. Cun	tccagtga	actcgagcggg...2411...---ttgaagcaaaaagggtctgg	AAACTG	-Ttt	TTCTGTAgcTTTAAAt	gagtaggtgagcaaatct...138...aacagaaatgc	acaatacc	
C. Fam	tccagtga	actcgagcggg...2409...---ttaaagcaaaaagggtctgg	AAACTG	-Ttt	TTCTGTAgcTTTAAAt	gagtaggtgagcaaatct...140...aacagaaatgc	acaatacc	
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O. Avi	tccagtga	actcgagcggg...2404...---ttaaagcaaaaagggtctgg	AAACTG	-Ttt	TTCTGTAgcTTTAAAt	gagtaggtgagcaaatct...136...aacagaaatgc	acaatacc	
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	*****	**** * *			*****	*** * * *	*****	*****

id=155413 gene=ENSG0000184486 name=POU3F2 segment=chr6_99284082_99286660_1 type=E3 VIEW

Figure 483:



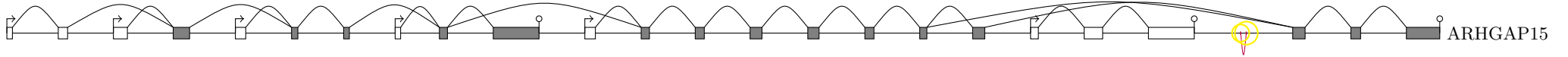
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P.Tro	aTCATAag	GTAGTAAT	tgagtgacttatcgctgtac...27...ctaagaattacc	acctccag
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C.Jac	aTCATAag	GTAGTAAT	tgagtgacttatcgctgtac...27...ctaagaattacc	agctccag
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R.Nor	aTCATAag	GTAGTAAT	tgagtgacttatcgctgtac...27...ctaagaattacc	agctccag
O.Cun	aTCATAag	GTAGTAAT	tgagtgacttatcgctgtac...27...ctaagaattacc	agctccag
C.Fam	atCATAag	GTAGTAAT	tgagtgacttatcgctgtac...27...ctaagaattacc	agctccag
F.Cat	atCATAag	GTAGTAAT	tgagtgacttatcgctgtac...27...ctaagaattacc	agctccag
B.Tau	aTCATAag	GTAGTAAT	tgagtgacttatcgctgtac...27...ctaagaattacc	agctccag
E.Cab	aTCATAag	GTAGTAAT	tgagtgacttatcgctgtac...27...ctaagaattacc	agctccag
S.Sus	aTCATAag	GTAGTAAT	tgagtgacttatcgctgtac...27...ctaagaattacc	agctccag
O.Avi	aTCATAag	GTAGTAAT	tgagtgacttatcgctgtac...27...ctaagaattacc	agctccag
L.Afr	aTCATAag	GTAGTAAT	tgagtgacttatcgctgtac...27...ctaagaattacc	agctccag
	*****	*****	*****	* *****

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R.Mac	tgtgtag	gtaggttgataa...1311...agtgaacacagttgaaat-atATTGgCTACTGTGGT	gtggattatctataaatttggataaatgacttct---atttttttttttttccag	aatacttt
P.Tro	tgtgtag	gtaggttgataa...1327...aatgacacagttgaaat-atATTGgCTACTGTGGT	gtggattatctataaatttggataaatgacttttcta-tttttttcttattttccag	aatacttt
P.Abe	tgtgtag	gtaggttgataa...1614...aatgacacagttgaaat-atATTGgCTACTGTGGT	gtggattatctataaatttggataaatgacttttcta-tttttttcttattttccag	aatacttt
C.Jac	tatgtag	gtaggttgataa...1304...aagtacacagttgaaat-atATTGgCTACTGTGGT	gtggattatctataaatttggataaatgacttttcta-tttttcttattttccag	aatacttt
M.Mus	tttgtag	gtaggttgataa...1325...aatgacacagttgaaat-atATTGgCTACTGTGGT	gtggattatctataaatttggataaatgacttttcta-tttttttcttattttccag	aatacttt
R.Nor	tttgtag	gtaggttgataa...1284...aatgacacagttgaaat-atATTGgCTACTGTGGT	gtggattatctataaatttggataaatgacttttcta-tttttttcttattttccag	aatacttt
O.Cun	tgttag	gtaggttgataa...1207...agtgaacacagttgaaat-atATTGgCTACTGTGGT	gtggattatctataaatttggataaatgacttttcta-tttttttcttattttccag	aatacttt
C.Fam	tttgtag	gtaggttgataa...1326...aatgacacagttgaaat-atATTGgCTACTGTGGT	gtggattatctataaatttggataaatgacttttcta-tttttttcttattttccag	agtacttt
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B.Tau	ttgtag	gtaggttgataa...1265...aatgacacagttgaaat-atATTGgCTACTGTGGT	gtggattatctataaatttggataaatgacttttcta-tttttttcttattttccag	agtacttt
E.Cab	ttgtag	gtaggttgataa...1385...aatgacacagttgaaat-atATTGgCTACTGTGGT	gtggattatctataaatttggataaatgacttttcta-tttttttcttattttccag	agtacttt
S.Sus	ttgtag	gtaggttgataa...1376...aatgacacagttgaaat-atATTGgCTACTGTGGT	gtggattatctataaatttggataaatgacttttcta-tttttttcttattttccag	agtacttt
O.Avi	ttgtag	gtaggttgataa...1290...aatgacacagttgaaat-atATTGgCTACTGTGGT	gtggattatctataaatttggataaatgacttttcta-tttttttcttattttccag	agtacttt
L.Afr	tgtgtag	gtaggttgataa...1374...aatgacacagttgaaat-atATTGgCTACTGTGGT	gtggattatctataaatttggataaatgacttttcta-tttttttcttattttccag	aatgcttt
	*	* ** * ** * ***** * * ** ***** ***** * ** * * ***** * * ** *		

id=768586 gene=ENSG00000131051 name=RBM39 segment=chr20_34323004_34324434_-1 type=IN VIEW

Figure 484: CS=9



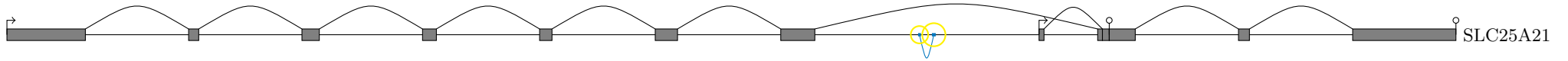
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C. Fam	ttaata	gcattatggtt...4855...ctctaggtgcagaaggctgt	TAACGGTT	gcTGATGA	AGTAGGCAAACATTA	acataataattagtgcttgt...37...gtgtttccag	aagagaag
F. Cat	ttaata	gcattatggtt...4855...ctctaggtgcagaaggctgt	TAACGGTT	gcTGATGA	AGTAGGCAAACATTA	acataataattagtgcttgt...37...gtgtttccag	aagagaag
B. Tau	ttaata	gcattatggtt...4855...ctctaggtgcagaaggctgt	TAACGGTT	gcTGATGA	AGTAGGCAAACATTA	acataataattagtgcttgt...37...gtgtttccag	aagagaag
E. Cab	ttaata	gcattatggtt...4855...ctctaggtgcagaaggctgt	TAACGGTT	gcTGATGA	AGTAGGCAAACATTA	acataataattagtgcttgt...37...gtgtttccag	aagagaag
O. Avi	ttaata	gcattatggtt...4856...ctctaggtgcagaaggctgt	TAACGGTT	gcTGATGA	AGTAGGCAAACATTA	acataataattagtgcttgt...36...cggtttccag	aagagaag
L. Afr	ttaata	gcattatggtt...4855...ctctaggtgcagaaggctgt	TAACGGTT	gcTGATGA	AGTAGGCAAACATTA	acataataattagtgcttgt...37...gtgtttccag	aagagaag
	*****	**** * * * *	*****	*****	*****	*****	*****

id=479702 gene=ENSG0000075884 name=ARHGAP15 segment=chr2.144366329.144381701.1 type=IN

H. Sap	ttaata	gcattatggtt...4896...ggcaaacattaacataataa	TTAGTGT	TTGT	aaTTGTTTCATTA	aAACC	aGTTG	ttccatttctcctcgtgtttccag	aagagaag
R. Mac	ttaata	gcattatggtt...4896...ggcaaacattaacataataa	TTAGTGT	TTGT	aaTTGTTTCATTA	aAACC	aGTTG	ttccatttctcctcgtgtttccag	aagagaag
P. Tro	ttaata	gcattatggtt...4896...ggcaaacattaacataataa	TTAGTGT	TTGT	aaTTGTTTCATTA	aAACC	aGTTG	ttccatttctcctcgtgtttccag	aagagaag
P. Abe	ttaata	gcattatggtt...4896...ggcaaacattaacataataa	TTAGTGT	TTGT	aaTTGTTTCATTA	aAACC	aGTTG	ttccatttctcctcgtgtttccag	aagagaag
C. Jac	ttaata	gcattatggtt...4896...ggcaaacattaacataataa	TTAGTGT	TTGT	aaTTGTTTCATTA	aAACC	aGTTG	ttccatttctcctcgtgtttccag	aagagaag
M. Mus	ttaattg	gcatgatggtt...4896...ggcaaacattaacataataa	TTAGTGT	TTGT	aaTTGTTTCATTA	aAACC	aGTTG	ttccatttctcctcgtgtttccag	aagagaag
R. Nor	ttaata	gcatgatggtt...4896...ggcaaacattaacataataa	TTAGTGT	TTGT	aaTTGTTTCATTA	aAACC	aGTTG	ttccatttctcctcgtgtttccag	aagagaag
C. Por	ttaata	gcattatggtt...4896...ggcaaacattaacataataa	TTAGTGT	TTGT	aaTTGTTTCATTA	aAACC	aGTTG	ttccatttctcctcgtgtttccag	aagagaag
O. Cun	ttaata	gcattatggtt...4896...ggcaaacattaacataataa	TTAGTGT	TTGT	aaTTGTTTCATTA	aAACC	aGTTG	ttccatttctcctcgtgtttccag	aagagaag
C. Fam	ttaata	gcattatggtt...4896...ggcaaacattaacataataa	TTAGTGT	TTGT	aaTTGTTTCATTA	aAACC	aGTTG	ttccatttctcctcgtgtttccag	aagagaag
F. Cat	ttaata	gcattatggtt...4896...ggcaaacattaacataataa	TTAGTGT	TTGT	aaTTGTTTCATTA	aAACC	aGTTG	ttccatttctcctcgtgtttccag	aagagaag
B. Tau	ttaata	gcattatggtt...4896...ggcaaacattaacataataa	TTAGTGT	TTGT	aaTTGTTTCATTA	aAACC	aGTTG	ttccatttctcctcgtgtttccag	aagagaag
E. Cab	ttaata	gcattatggtt...4896...ggcaaacattaacataataa	TTAGTGT	TTGT	aaTTGTTTCATTA	aAACC	aGTTG	ttccatttctcctcgtgtttccag	aagagaag
O. Avi	ttaata	gcattatggtt...4897...ggcaaacattaacataataa	TTAGTGT	TTGT	aaTTGTTTCATTA	aAACC	aGTTG	ttccatttctcctcgtgtttccag	aagagaag
L. Afr	ttaata	gcattatggtt...4896...ggcaaacattaacataataa	TTAGTGT	TTGT	aaTTGTTTCATTA	aAACC	aGTTG	ttccatttctcctcgtgtttccag	aagagaag
	*****	**** * * * *	*****	*****	*****	*****	*****	*****	*****

id=479702 gene=ENSG0000075884 name=ARHGAP15 segment=chr2.144366329.144381701.1 type=IN VIEW

Figure 485:



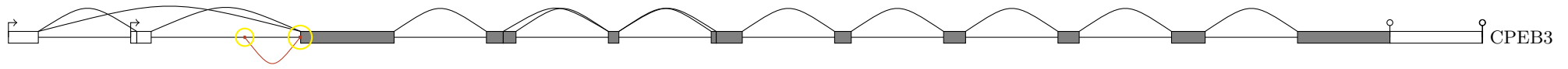
H. Sap	tcaataag	gtaactat	tttaa...4820...	---acatttggggg-tccacacac	AAATGAGCATT	TTTAG	-----taggcttcatggtggaagt	...90...	gccaattatac	aaatcatc
R. Mac	tcaataag	gtaactat	tttaa...4820...	---acatttggggg-tccacacac	AAATGAGCATT	TTTAG	-----taggcttcatggtggaagt	...90...	gccaattatac	aaatcatc
P. Tro	tcaataag	gtaactat	tttaa...4820...	---acatttggggg-tccacacac	AAATGAGCATT	TTTAG	-----taggcttcatggtggaagt	...90...	gccaattatac	aaatcatc
P. Abe	tcaataag	gtaactat	tttaa...4820...	---catttggggggtccacacac	AAATGAGCATT	TTTAG	-----taggcttcatggtggaagt	...90...	gccaattatac	aaatcatc
C. Jac	tcaataag	gtaactat	tttaa...4820...	---acatttggggg-tccacacac	AAATGAGCATT	TTTAG	-----taggcttcatggtggaagt	...90...	gccaattatac	aaatcatc
C. Por	tcaataag	gtaactat	tttaa...4706...	ttaataacaggaag-ctagca	-----CTTctCAGTACAGTg	gatcagctacac-gt	gaaaat-...204...	gccaattatac	aaatcatc	aaatcatc
O. Cun	tcaataag	gtaactat	tttca...4820...	---acatttggggg-tccacacac	AAATGAGCATT	TTTAG	-----taggcttcatggtggaagt	...90...	gccaattatac	aaatcatc
C. Fam	tcaataag	gtaactat	tttaa...4820...	---acatttggggg-tccacacac	AAATGAGCATT	TTTAG	-----taggcttcatggtggaagt	...90...	gccaattatac	aaatcatc
B. Tau	tcaataag	gtaactat	tttca...4820...	---acatttggggg-tccacacac	AAATGAGCATT	TTTAG	-----taggcttcatggtggaagt	...90...	gccaattatac	aaatcatc
E. Cab	tcaataag	gtaactat	tttaa...4820...	---acatttggggg-tccacacac	AAATGAGCATT	TTTAG	-----taggcttcatggtggaagt	...90...	gccaattatac	aaatcatc
S. Sus	tcaataag	gtaactat	tttga...4820...	---acatttggggg-tccacacac	AAATGAGCATT	TTTAG	-----taggcttcatggtggaagt	...90...	gccaattatac	aaatcatc
O. Avi	tcaataag	gtaactat	tttca...4820...	---acatttggggg-tccacacac	AAATGAGCATT	TTTAG	-----taggcttcatggtggaagt	...90...	gccaattatac	aaatcatc
L. Afr	tcaatcag	gtaactat	tttaa...4820...	---acatttggggg-tccacacac	AAATGAGCATT	TTTAG	-----taggcttcatggtggaagt	...90...	gccaattatac	aaatcatc
	**** *	***** *		* ** *	**** *	**** *	* ** *	***** *	***** *	***** *

id=109837 gene=ENSG00000183032 name=SLC25A21 segment=chr14.37154415.37180522_-1 type=IN

H. Sap	tcaataag	gtaactat	tttaa...4887...	aaaatattctggccaattag-	CTAA	AGTGTGCTTg	ATTtcctctgttttgatacagta	aactaactaag	tacattgtgaagccaattatac	aaatcatc
R. Mac	tcaataag	gtaactat	tttaa...4887...	aaaatattctggccaattag-	CTAA	AGTGTGCTTg	ATTtcctctgtttgatacagta	aactaactaag	tacattgtgaagccaattatac	aaatcatc
P. Tro	tcaataag	gtaactat	tttaa...4887...	aaaatattctggccaattag-	CTAA	AGTGTGCTTg	ATTtcctctgtttgatacagta	aactaactaag	tacattgtgaagccaattatac	aaatcatc
P. Abe	tcaataag	gtaactat	tttaa...4887...	aaaatattctggccaattag-	CTAA	AGTGTGCTTg	ATTtcctctgtttgatacagta	aactaactaag	tacattgtgaagccaattatac	aaatcatc
C. Jac	tcaataag	gtaactat	tttaa...4887...	aaaatattctggccaattag-	CTAA	AGTGTGCTTg	ATTtcctctgtttgatacagta	aactaactaag	tacattgtgaagccaattatac	aaatcatc
C. Por	tcaataag	gtaactat	tttaa...4927...	ctcctgttttgatacagtaa	TACTa--aGTACATTg	GAAG	-----	ccaattatac	aaatcatc	aaatcatc
O. Cun	tcaataag	gtaactat	tttca...4887...	aaaatattctggccaattag-	CTAA	AGTGTGCTTg	ATTtcctctgtttgatacagta	aactaactaag	tacattgtgaagccaattatac	aaatcatc
C. Fam	tcaataag	gtaactat	tttaa...4887...	aaaatattctggccaattag-	CTAA	AGTGTGCTTg	ATTtcctctgtttgatacagta	aactaactaag	tacattgtgaagccaattatac	aaatcatc
B. Tau	tcaataag	gtaactat	tttca...4887...	aaaatattctggccaattag-	CTAA	AGTGTGCTTg	ATTtcctctgtttgatacagta	aactaactaag	tacattgtgaagccaattatac	aaatcatc
E. Cab	tcaataag	gtaactat	tttaa...4887...	aaaatattctggccaattag-	CTAA	AGTGTGCTTg	ATTtcctctgtttgatacagta	aactaactaag	tacattgtgaagccaattatac	aaatcatc
S. Sus	tcaataag	gtaactat	tttga...4887...	aaaatattctggccaattag-	CTAA	AGTGTGCTTg	ATTtcctctgtttgatacagta	aactaactaag	tacattgtgaagccaattatac	aaatcatc
O. Avi	tcaataag	gtaactat	tttca...4887...	aaaatattctggccaattag-	CTAA	AGTGTGCTTg	ATTtcctctgtttgatacagta	aactaactaag	tacattgtgaagccaattatac	aaatcatc
L. Afr	tcaatcag	gtaactat	tttaa...4887...	aaaatattctggccaattag-	CTAA	AGTGTGCTTg	ATTtcctctgtttgatacagta	aactaactaag	tacattgtgaagccaattatac	aaatcatc
	**** *	***** *		* ** *	**** *	**** *	* ** *	***** *	***** *	***** *

id=109837 gene=ENSG00000183032 name=SLC25A21 segment=chr14.37154415.37180522_-1 type=IN VIEW

Figure 489:



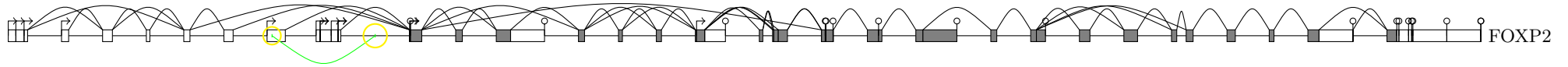
H.Sap	actcaaag	gtaactgctact...2458...	-----gcaaacgctctgagttccgg	TGAAGGGA	AAAGAGACGTG	gcgaaattgctgtcttttct-----	..266...	ttcccgtttcag	ctgcgcaa
R.Mac	actcaaag	gtaactgctact...2470...	-----gcaaacgctctgagttccgg	TGAAGGGA	AAAGAGACGTG	gcgaaattgctgtctttctg-----	..265...	ttcccgtttcag	ctgcgcaa
P.Tro	actcaaag	gtaactgctact...2469...	-----gcaaacgctctgagttccgg	TGAAGGGA	AAAGAGACGTG	gcgaaattgctgtcttttct-----	..266...	ttcccgtttcag	ctgcgcaa
P.Abe	actcaaag	gtaactgctact...2462...	-----gcaaacgctctgagttccgg	TGAAGGGA	AAAGAGACGTG	gcgaaattgctgtctttctg-----	..265...	ttcccgtttcag	ctgcgcaa
C.Jac	actcaaag	gtaactgctact...2432...	-----gcaaacgctctgagttccgg	TGAAGGGA	AAAGAGACGTG	gcgaaattgctgtctttctg-----	..264...	ttcccgtttcag	ctgcgcaa
M.Mus	acttaaag	gtaactgctgct...2411...	-----ttctaagtgtccagctggg	GAAGGGGAA	AGAGGTCGTGT	-----accaagtcttttaaccttg..	..425...	ttcccgtttcag	ctgcgcaa
R.Nor	acttaaag	gtaactgctgct...2373...	-----ttttaagtgtccagctggg	GAA-GGGGAA	AGAGGTCGTGT	-----accaagtcttttaaccttg..	..424...	ttcccgtttcag	ctgcgcaa
C.Por	actcaaag	gtaactgctaag...2293...	-----tcgtaagagctcgatctgag	GAAGaGGGAA	AAAGGG	-----tcgctcgtcggcgtctttta	..410...	ttcccgtttcag	ctgcgcaa
O.Cun	acacaaag	gtaattgctagt...2403...	-----gtgaacactctgagttccgg	TGAAGGGA	AAAGAGA	cgtggcgaaattgctgtctt	..261...	ttcccatttcag	ctgcgcaa
B.Tau	cctcaaag	gtaactgctgct...2073..	tgtttctttaaagtccccga	GCGGgGAAGGGGAAGA	AAAGGTCGTGT	-----gtggtgtcttttaaccttg..	..410...	ttcccatttcag	ctgcgcaa
E.Cab	actcaaag	gtaactgctact...2404...	-----gtgaacgctctgagttccgg	TGAAGGGA	AAAGAGACGTG	gcgaaattgctgtctttctg-----	..254...	ttcccgtttcag	ctgcgcaa
S.Sus	actcaaag	gtaactgctgct...2468...	-----gtgaacgctctgagttccgg	TGAAGGGA	AAAGAGACGTG	gcgaaattgctgtctttctg-----	..256...	ttcccgtttcag	ctgcgcaa
L.Afr	actcaaag	gtaactgctatt...2418...	-----gtgaacactctgagttccgg	TGAAGGGA	AAAGAGACGTG	gcgaaattgcgctctttctg-----	..261...	ttcccgtttcag	ctgccc
			* * * * *	* * * * *	* * * * *	* * * * *		* * * * *	* * * * *

id=628097 gene=ENSG00000107864 name=CPEB3 segment=chr10.94000119.94002925_-1 type=I5

H.Sap	actcaaag	gtaactgctact...2749...	---catgatcacattgacaataa	CGCGTCTCTCTTT	ttTCCGgtTTCAg	ctgcgcaa
R.Mac	actcaaag	gtaactgctact...2760...	---catgatcacattgacaataa	CGCGTCTCTCTTT	ttTCCGgtTTCAg	ctgcgcaa
P.Tro	actcaaag	gtaactgctact...2760...	---catgatcacattgacaataa	CGCGTCTCTCTTT	ttTCCGgtTTCAg	ctgcgcaa
P.Abe	actcaaag	gtaactgctact...2752...	---catgatcacattgacaataa	CGCGTCTCTCTTT	ttTCCGgtTTCAg	ctgcgcaa
C.Jac	actcaaag	gtaactgctact...2721...	---aatgatcacattgacaataa	CGCGTCTCTCTTT	ttTCCGgtTTCAg	ctgcgcaa
M.Mus	acttaaag	gtaactgctgct...2863...	..tcatgatcacactgacaata	ACGCATCTcTCTTTcTTCCG	gTTTCag	ctgcgcaa
R.Nor	acttaaag	gtaactgctgct...2823...	..tcatgatcacactgacaata	ACACATCTcTCTTTcTTCCG	gTTTCag	ctgcgcaa
C.Por	actcaaag	gtaactgctaag...2732...	-----acattgttaataacgcatct	TCTCTTTtTTCCG	gTTTCag	ctgcgcaa
O.Cun	acacaaag	gtaattgctagt...2691...	-----cactttgacaataacgcatc	TCTCTTTtTTCCG	atTTCAg	ctgcgcaa
B.Tau	cctcaaag	gtaactgctgct...2516...	..taacgaacacactggcaata	ACGCGtTTCTCTTTTTTCCG	aTTTCag	CTGC gcaa
E.Cab	actcaaag	gtaactgctact...2683...	---aacgatcacattgacaataa	CGCGTCTCTCTTT	ttTCCGgtTTCAg	ctgcgcaa
S.Sus	actcaaag	gtaactgctgct...2749...	---aacgaacacattgacaataa	CGCGTCTCTCTTT	ttTCCGgtTTCAg	ctgcgcaa
L.Afr	actcaaag	gtaactgctatt...2706...	---aatgatcacattgacaataa	CGCGT--CTCTTT	ttTCCGgtTTCAg	ctgccc
			* * * * *	* * * * *	* * * * *	* * * * *

id=628097 gene=ENSG00000107864 name=CPEB3 segment=chr10.94000119.94002925_-1 type=I5 VIEW

Figure 490:



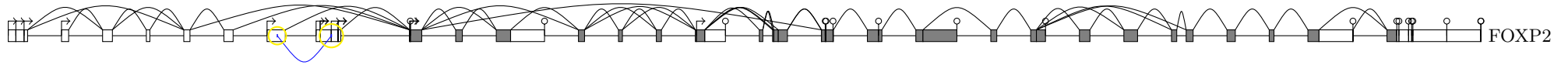
H. Sap	ctttcttt	tgcatctgctgt...25..tcctgggggagagaaaagtct	TTCTTCTCTGCTAGTTG	attcctg--ttttt	gtgaagca...163..atttcaattaag	gtagtaa
R. Mac	ctttcttt	tgcatctgctgt...25..tcctgggggagagaaaagtct	TTCTTCTCTGCTAGTTG	attcctg--ttttt	gtgaagca...163..atttcaattaag	gtagtaa
P. Tro	ctttcttt	tgcatctgctgt...25..tcctgggggagagaaaagtct	TTCTTCTCTGCTAGTTG	attcctg--ttttt	gtgaagca...163..atttcaattaag	gtagtaa
P. Abe	ctttcttt	tgcatctgctgt...25..tcctgggggagagaaaagtct	TTCTTCTCTGCTAGTTG	attcctg--ttttt	gtgaagca...163..atttcaattaag	gtagtaa
C. Jac	ctttcttt	tgcatctgctgt...25..tcctgggggagagaaaagtct	TTCTTCTCTGCTAGTTG	attcctg--ttttt	gtgaagca...163..atttcaattaag	gtagtaa
M. Mus	ctttcttt	tgcatctgctgt...25..tcctgggggagagaaaagtct	TTCTTCTCTGCTAGTTG	attcctg--ttttt	gtgaagca...164..atttcaattaag	gtagtaa
R. Nor	ctttcttt	tgcatctgctgt...25..tcctgggggagagaaaagtct	TTCTTCTCTGCTAGTTG	attcctg--ttttt	gtgaagca...165..atttcaattaag	gtagtaa
C. Por	ctttcttt	tgcatctgctgt...25..tcctgggggagagaaaagtct	TTCTTCTCTGCTAGTTG	attcctg--ttttt	gtgaagca...163..atttcaattaag	gtagtaa
O. Cun	ctttcttt	tgcatctgctgt...25..tcctgggggagagaaaagtct	TTCTTCTCTGCTAGTTG	attcctg--ttttt	gtgaagca...163..atttcaattaag	gtagtaa
C. Fam	ctttcttt	tgcatctgctgt...25..tcctgggggagagaaaagtct	TTCTTCTCTGCTAGTTG	attcctg--ttttt	gtgaagca...163..atttcaattaag	gtagtaa
F. Cat	ctttcttt	tgcatctgctgt...25..tcctgggggagagaaaagtct	TTCTTCTCTGCTAGTTG	attcctg--ttttt	gtgaagca...163..atttcaattaag	gtagtaa
B. Tau	ctttcttt	tgcatctgctgt...25..tcctgggggagagaaaagtct	TTCTTCTCTGCTAGTTG	attcctg--ttttt	gtgaagca...163..atttcaattaag	gtagtaa
E. Cab	ctttcttt	tgcatctgctgt...25..tcctgggggagagaaaagtct	TTCTTCTCTGCTAGTTG	attcctg--ttttt	gtgaagca...163..atttcaattaag	gtagtaa
L. Afr	ctttcttt	tgcatctgctgt...25..tcctgggggagagaaaagtct	TTCTTCTCTGCTAGTTG	attcctg--ttttt	gtgaagca...163..atttcaattaag	gtagtaa
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id=410474 gene=ENSG00000128573 name=FOXP2 segment=chr7_114054329.114054597.1 type=AN

H. Sap	cagagaag	gtacgttacttt...4878..ttctaagatgctgtctctg	TAATTGGCAGAGAGGGA	catcttgataatggaagtgt...30..ttaatcactttt	aggtatta
R. Mac	cagagaag	gtacgttacttt...4878..ttctaagatgctgtctctg	TAATTGGCAGAGAGGGA	catcttgataatggaagtgt...30..ttaatcactttt	aggtatta
P. Tro	cagagaag	gtacgttacttt...4878..ttctaagatgctgtctctg	TAATTGGCAGAGAGGGA	catcttgataatggaagtgt...30..ttaatcactttt	aggtatta
P. Abe	cagagaag	gtacgttacttt...4878..ttctaagatgctgtctctg	TAATTGGCAGAGAGGGA	catcttgataatggaagtgt...30..ttaatcactttt	aggtatta
C. Jac	cagagaag	gtacgttacttt...4878..ttctaagatgctgtctctg	TAATTGGCAGAGAGGGA	catcttgataatggaagtgt...30..ttaatcactttt	aggtatta
M. Mus	cagagaag	gtatgttacttt...4878..ccacaatgatgctgcctgtg	TAATTGGCAGAGAGGGA	catcctgagaatggaggtgt...30..cfaatcactttt	aggtatta
R. Nor	cagagaag	gtacgttacttt...4878..ccacagtgatgctgcctgtg	TAATTGGCAGAGAGGGA	catcctgataatggaagtgt...30..ttaatcactttt	aggtatta
C. Por	cagagaag	gtacgttacttt...4878..ttctaagatgctgtctctg	TAATTGGCAGAGAGGGA	catcttgataatggaagtgt...30..ttaatcactttt	aggtatta
O. Cun	cagagaag	gtacgttacttt...4878..ctctaagatgctgtctctg	TAATTGGCAGAGAGGGA	catcttgataatggaagtgt...30..ttaatcactttt	aggtatta
C. Fam	aagagaag	gtacgttacttt...4878..ttcctaagatgctgtctctg	TAATTGGCAGAGAGGGA	catcttgataatggaagtgt...30..ttaatcactttt	aggtatta
F. Cat	aagagaag	gtacgttacttt...4878..tcctaagatgctgtctctg	TAATTGGCAGAGAGGGA	catcttgataatggaagtgt...30..ttaatcactttt	aggtatta
B. Tau	aagagaag	gtacgttacttt...4878..ttcctaagatgctgtctctg	TAATTGGCAGAGAGGGA	catcttgataatggaagtgt...30..ttaatcactttt	aggtatta
E. Cab	aagagaag	gtacgttactct...4878..tcctaagatgctgtctctg	TAATTGGCAGAGAGGGA	catcttgataatggaagtgt...30..ttaatcactttt	aggtatta
L. Afr	aagagaag	gtacgttacttt...4878..ttctaagatgctgtctctg	TAATTGGCAGAGAGGGA	catcttgataatggaagtgt...30..ttaatcactttt	aggtatta
*****	***	*****	***	*****	*****

id=410482 gene=ENSG00000128573 name=FOXP2 segment=chr7_114055416.114066554.1 type=IN VIEW

Figure 492:



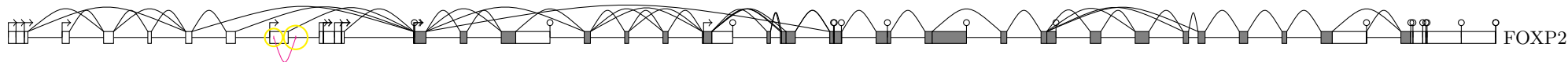
H.Sap	ctttc	tgc	atc	ctg	ctg	ctgt	...	103	...	ggc	agaaa	aattg	acaaa	aagg	ATTG	CAAA	CACC	ATTAG	ctg	aaa	at	ttc	ca	ttt	cat	...	84	...	att	ca	at	taag	g	tt	ag	t	a	
R.Mac	ctttc	tgc	atc	ctg	ctg	ctgt	...	103	...	ggc	agaaa	aattg	acaaa	aagg	ATTG	CAAA	CACC	ATTAG	ctg	aaa	at	ttc	ca	ttt	cat	...	84	...	att	ca	at	taag	g	tt	ag	t	a	
P.Tro	ctttc	tgc	atc	ctg	ctg	ctgt	...	103	...	ggc	agaaa	aattg	acaaa	aagg	ATTG	CAAA	CACC	ATTAG	ctg	aaa	at	ttc	ca	ttt	cat	...	84	...	att	ca	at	taag	g	tt	ag	t	a	
P.Abe	ctttc	tgc	atc	ctg	ctg	ctgt	...	103	...	ggc	agaaa	aattg	acaaa	aagg	ATTG	CAAA	CACC	ATTAG	ctg	aaa	at	ttc	ca	ttt	cat	...	84	...	att	ca	at	taag	g	tt	ag	t	a	
C.Jac	ctttc	tgc	atc	ctg	ctg	ctgt	...	103	...	ggc	agaaa	aattg	acaaa	aagg	ATTG	CAAA	CACC	ATTAG	ctg	aaa	at	ttc	ca	ttt	cat	...	84	...	att	ca	at	taag	g	tt	ag	t	a	
M.Mus	ctttc	tgc	atc	ctg	ctg	ctgt	...	104	...	g	cag	agaaa	aattg	acaaa	aagg	ATTG	CAAA	CACC	ATTAG	ctg	aaa	at	ttc	ca	ttt	cat	...	84	...	att	ca	at	taag	g	tt	ag	t	a
R.Nor	ctttc	tgc	atc	ctg	ctg	ctgt	...	105	...	ggc	agaaa	aattg	acaaa	aagg	ATTG	CAAA	CACC	ATTAG	ctg	g	aga	at	ttc	ca	ttt	cat	...	84	...	att	ca	at	taag	g	tt	ag	t	a
C.Por	ctttc	tgc	atc	ctg	ctg	ctgt	...	103	...	ggc	agaaa	aattg	acaaa	aagg	ATTG	CAAA	CACC	ATTAG	ctg	aaa	at	ttc	ca	ttt	cat	...	84	...	att	ca	at	taag	g	tt	ag	t	a	
O.Cun	ctttc	tgc	atc	ctg	ctg	ctgt	...	103	...	ggc	agaaa	aattg	acaaa	aagg	ATTG	CAAA	CACC	ATTAG	ctg	aaa	at	ttc	ca	ttt	cat	...	84	...	att	ca	at	taag	g	tt	ag	t	a	
C.Fam	ctttc	tgc	atc	ctg	ctg	ctgt	...	103	...	ggc	agaaa	aattg	acaaa	aagg	ATTG	CAAA	CACC	ATTAG	ctg	aaa	at	ttc	ca	ttt	cat	...	84	...	att	ca	at	taag	g	tt	ag	t	a	
F.Cat	ctttc	tgc	atc	ctg	ctg	ctgt	...	103	...	ggc	agaaa	aattg	acaaa	aagg	ATTG	CAAA	CACC	ATTAG	ctg	aaa	at	ttc	ca	ttt	cat	...	84	...	att	ca	at	taag	g	tt	ag	t	a	
B.Tau	ctttc	tgc	atc	ctg	ctg	ctgt	...	103	...	ggc	agaaa	aattg	acaaa	aagg	ATTG	CAAA	CACC	ATTAG	ctg	aaa	at	ttc	ca	ttt	cat	...	84	...	att	ca	at	taag	g	tt	ag	t	a	
E.Cab	ctttc	tgc	atc	ctg	ctg	ctgt	...	103	...	ggc	agaaa	aattg	acaaa	aagg	ATTG	CAAA	CACC	ATTAG	ctg	aaa	at	ttc	ca	ttt	cat	...	84	...	att	ca	at	taag	g	tt	ag	t	a	
O.Avi	ctttc	tgc	atc	ctg	ctg	ctgt	...	103	...	ggc	agaaa	aattg	acaaa	aagg	ATTG	CAAA	CACC	ATTAG	ctg	aaa	at	ttc	ca	ttt	cat	...	84	...	att	ca	at	taag	g	tt	ag	t	a	
L.Afr	ctttc	tgc	atc	ctg	ctg	ctgt	...	103	...	ggc	agaaa	aattg	acaaa	aagg	ATTG	CAAA	CACC	ATTAG	ctg	aaa	at	ttc	ca	ttt	cat	...	84	...	att	ca	at	taag	g	tt	ag	t	a	
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	

id=410474 gene=ENSG00000128573 name=FOXP2 segment=chr7_114054329.114054597.1 type=AN

H.Sap	aaatg	ctg	at	ttt	gt	gt	acg	...	114	...	a	t	a	c	t	g	c	t	g	t	a	a	a	t	g	t	t	g	CTG	ATG	G	T	G	g	c	TTG	a	CAG	T	g	a	c	
R.Mac	aaatg	ctg	at	ttt	gt	gt	acg	...	114	...	a	t	a	c	t	g	c	t	g	t	a	a	a	t	g	t	t	g	CTG	ATG	G	T	G	g	c	TTG	a	CAG	T	g	a	c	
P.Tro	aaatg	ctg	at	ttt	gt	gt	acg	...	114	...	a	t	a	c	t	g	c	t	g	t	a	a	a	t	g	t	t	g	CTG	ATG	G	T	G	g	c	TTG	a	CAG	T	g	a	c	
P.Abe	aaatg	ctg	at	ttt	gt	gt	acg	...	114	...	a	t	a	c	t	g	c	t	g	t	a	a	a	t	g	t	t	g	CTG	ATG	G	T	G	g	c	TTG	a	CAG	T	g	a	c	
C.Jac	aaatg	ctg	at	ttt	gt	gt	acg	...	114	...	a	t	a	c	t	g	c	t	g	t	a	a	a	t	g	t	t	g	CTG	ATG	G	T	G	g	c	TTG	a	CAG	T	g	a	c	
M.Mus	aaatg	ctg	at	ttt	gt	gt	acg	...	114	...	a	t	a	c	t	g	c	t	g	t	a	a	a	c	a	g	t	t	g	CTG	ATG	G	T	G	g	c	TTG	a	CAG	T	g	a	c
R.Nor	aaatg	ctg	at	ttt	gt	gt	acg	...	114	...	a	t	a	c	t	g	c	t	g	t	a	a	a	t	g	t	t	g	CTG	A	c	G	G	T	G	g	TTG	a	CAG	T	g	a	c
C.Por	aaatg	ctg	a	t	g	t	t	g	t	acg	...	114	...	a	t	a	c	t	g	c	t	a	a	a	t	g	t	t	g	CTG	ATG	G	T	G	g	c	TTG	a	CAG	T	g	a	c
O.Cun	aaatg	ctg	at	ttt	gt	gt	acg	...	114	...	a	t	a	c	t	g	c	t	g	t	a	a	a	t	g	t	t	g	CTG	ATG	G	T	G	g	c	TTG	a	CAG	T	g	a	c	
C.Fam	aaatg	ctg	at	ttt	gt	gt	acg	...	114	...	a	t	a	c	t	g	c	t	g	t	a	a	a	t	g	t	t	g	CTG	ATG	G	T	G	g	c	TTG	a	CAG	T	g	a	c	
F.Cat	aaatg	ctg	at	ttt	gt	gt	acg	...	114	...	a	t	a	c	t	g	c	t	g	t	a	a	a	t	g	t	t	g	CTG	ATG	G	T	G	g	c	TTG	a	CAG	T	g	a	c	
B.Tau	aaatg	ctg	at	ttt	gt	gt	acg	...	114	...	a	t	a	c	t	g	c	t	g	t	a	a	a	t	g	t	t	g	CTG	ATG	G	T	G	g	c	TTG	a	CAG	T	g	a	c	
E.Cab	aaatg	ctg	at	ttt	gt	gt	acg	...	114	...	a	t	a	c	t	g	c	t	g	t	a	a	a	t	g	t	t	g	CTG	ATG	G	T	G	g	c	TTG	a	CAG	T	g	a	c	
O.Avi	aaatg	ctg	at	ttt	gt	gt	acg	...	114	...	a	t	a	c	t	g	c	t	g	t	a	a	a	t	g	t	t	g	CTG	ATG	G	T	G	g	c	TTG	a	CAG	T	g	a	c	
L.Afr	aaatg	ctg	at	ttt	gt	gt	acg	...	114	...	a	t	a	c	t	g	c	t	g	t	a	a	a	t	g	t	t	g	CTG	ATG	G	T	G	g	c	TTG	a	CAG	T	g	a	c	
*****	****	***	**	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

id=410478 gene=ENSG00000128573 name=FOXP2 segment=chr7_114055113.114055274.1 type=AN VIEW

Figure 493:



H. Sap	ctttcttt	tgcatctgctgtgtacagacttggcctttgtactcctttcc-----	TGGGGGAGAGAAAGTCTTT	-----	cttctctgctagttgattcc...178..	atttcaattaag	gttagtaa
R. Mac	ctttcttt	tgcatctgctgtgtacagacttggcctttgtactcctttcctgggggagagaaaagtctttcttctctgctagttgattc	CTGTTTTTGTGAAGC	agctaagaaaacatctgtgg-----	..144..	atttcaattaag	gttagtaa
P. Tro	ctttcttt	tgcatctgctgtgtacagacttggcctttgtactcctttcctgggggagagaaaagtctttcttctctgctagttgattc	CTGTTTTTGTGAAGC	agctaagaaaacatctgtgg-----	..144..	atttcaattaag	gttagtaa
P. Abe	ctttcttt	tgcatctgctgtgtacagacttggcctttgtactcctttcctgggggagagaaaagtctttcttctctgctagttgattc	CTGTTTTTGTGAAGC	agctaagaaaacatctgtgg-----	..144..	atttcaattaag	gttagtaa
C. Jac	ctttcttt	tgcatctgctgtgtacagacttggcctttgtactcctttcctgggggagagaaaagtctttcttctctgctagttgattc	CTGTTTTTGTGAAGC	agctaagaaaacatctgtgg-----	..144..	atttcaattaag	gttagtaa
M. Mus	ctttcttt	tgcatctgctgtgtacagacttggcctttgtactcctttcc-----	TGGGGGAGAGAAAGTCTTT	-----	cttctctgctagttgattcc...179..	atttcaattaag	gttagtaa
R. Nor	ctttcttt	tgcatctgctgtgtacagacttggcctttgtactcctttcc-----	TGGGGGAGAGAAAGTCTTT	-----	cttctctgctagttgattcc...180..	atttcaattaag	gttagtaa
C. Por	ctttcttt	tgcatctgctgtgtacagacttggcctttgtactcctttcctgggggagagaaaagtctttcttctctgctagttgattc	CTGTTTTTGTGAAGC	agctaagaaaacatctgtgg-----	..144..	atttcaattaag	gttagtaa
O. Cun	ctttcttt	tgcatctgctgtgtacagacttggcctttgtactcctttcctgggggagagaaaagtctttcttctctgctagttgattc	CTGTTTTTGTGAAGC	agctaagaaaacatctgtgg-----	..144..	atttcaattaag	gttagtaa
C. Fam	ctttcttt	tgcatctgctgtgtacagacttggcctttgtactcctttcctgggggagagaaaagtctttcttctctgctagttgattc	CTGTTTTTGTGAAGC	agctaagaaaacatctgtgg-----	..144..	atttcaattaag	gttagtaa
F. Cat	ctttcttt	tgcatctgctgtgtacagacttggcctttgtactcctttcctgggggagagaaaagtctttcttctctgctagttgattc	CTGTTTTTGTGAAGC	agctaagaaaacatctgtgg-----	..144..	atttcaattaag	gttagtaa
B. Tau	ctttcttt	tgcatctgctgtgtacagacttggcctttgtactcctttcctgggggagagaaaagtctttcttctctgctagttgattc	CTGTTTTTGTGAAGC	agctaagaaaacatctgtgg-----	..144..	atttcaattaag	gttagtaa
E. Cab	ctttcttt	tgcatctgctgtgtacagacttggcctttgtactcctttcctgggggagagaaaagtctttcttctctgctagttgattc	CTGTTTTTGTGAAGC	agctaagaaaacatctgtgg-----	..144..	atttcaattaag	gttagtaa
O. Avi	ctttcttt	tgcatctgctgtgtacagacttggcctttgtactcctttcc-----	TGGGGGAGAGAAAGTCTTT	-----	cttctctgctagttgattcc...178..	atttcaattaag	gttagtaa
L. Afr	ctttcttt	tgcatctgctgtgtacagacttggcctttgtactcctttcctgggggagagaaaagtctttcttctctgctagttgattc	CTGTTTTTGTGAAGC	agctaagaaaacatctgtgg-----	..144..	atttcaattaag	gttagtaa

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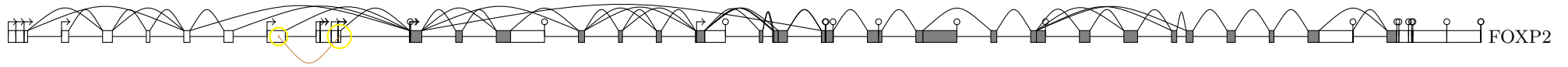
id=410474 gene=ENSG00000128573 name=FOXP2 segment=chr7_114054329_114054597_1 type=AN

H. Sap	caattaag	gttagtaattga...62...--aagtggtttggatgtgcattGAAGATTatTTCTTCTTggCTTA-----	tctgatgttggctgtgaa...305..	tgctggctcagt	cttgaacc
R. Mac	caattaag	gttagtaattga...172...gtaaa----ttgcagagcactgga-----	GCTTTACcAAAAgtGCAG	gtataatgtaagctgtc--...212..	tgctggctcagt
P. Tro	caattaag	gttagtaattga...172...gtaaa----ttgcagagcactgga-----	GCTTTACcAAAAgtGCAG	gtataatgtaagctgtc--...200..	tgctggctcagt
P. Abe	caattaag	gttagtaattga...172...gtaaa----ttgcagagcactgga-----	GCTTTACcAAAAgtGCAG	gtataatgtaagctgtc--...194..	tgctggctcagt
C. Jac	caattaag	gttagtaattga...172...gtaaa----ttgcagagcactgga-----	GCTTTACcAAAAgtGCAG	gtataatgtaagctgtc--...206..	tgctggctcagt
M. Mus	caattaag	gttagtaattga...62...--aagtggtttggatgtgcattGAAGATTatTTCTTCTTggCTTA-----	tctgatgttggctgtgaa...355..	tgctggctcagt	cttgaacc
R. Nor	caattaag	gttagtaattga...62...--aagtggtttggatgtgcattGAAGATTatTTCTTCTTggCTTA-----	tctgatgttggctgtgaa...371..	tgctggctcagt	cttgaacc
C. Por	caattaag	gttagtaattga...172...gtaaa----ttgcagagcactgga-----	GCTTTACcAAAAgtGCAG	gtataatgtaagctgtc--...201..	tgctggctcagt
O. Cun	caattaag	gttagtaattga...172...gtaaa----ttgcagagcactgga-----	GCTTTACcAAAAgtGCAG	gtataatgtaagctgtc--...217..	tgctggctcagt
C. Fam	caattaag	gttagtaattga...172...gtaaa----ttgcagagcactgga-----	GCTTTACcAAAAgtGCAG	gtataatgtaagctgtc--...281..	tgctggctcagt
F. Cat	caattaag	gttagtaattga...172...gtaaa----ttgcagagcactgga-----	GCTTTACcAAAAgtGCAG	gtataatgtaagctgtc--...273..	tgctggctcagt
B. Tau	caattaag	gttagtaattga...172...gtaaa----ttgcagagcactgga-----	GCTTTACcAAAAgtGCAG	gtataatgtaagctgtc--...202..	tgctggctcagt
E. Cab	caattaag	gttagtaattga...172...gtaaa----ttgcagagcactgga-----	GCTTTACcAAAAgtGCAG	gtataatgtaagctgtc--...233..	tgctggctcagt
O. Avi	caattaag	gttagtaattga...62...--aagtggtttggatgtgcattGAAGATTatTTCTTCTTggCTTA-----	tctgatgttggctgtgaa...298..	tgctggctcagt	cttgaacc
L. Afr	caattaag	gttagtaattga...172...gtaaa----ttgcagagcactgga-----	GCTTTACcAAAAgtGCAG	catataatgtaagctgtc--...248..	tgctggctcagt

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id=410475 gene=ENSG00000128573 name=FOXP2 segment=chr7_114054598_114055051_1 type=IN VIEW

Figure 494:



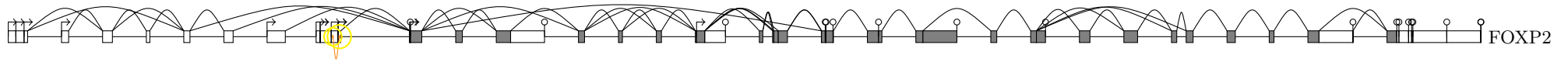
H.Sap	ctttcttt	tgcatctgctgt...125...tgacaacaccattagctgaAAATTTTCCaTTTCA	attgcaactatgcatgttta...65...attcaattaag	gtagtaa
R.Mac	ctttcttt	tgcatctgctgt...125...tgacaacaccattagctgaAAATTTTCCaTTTCA	attgcaactatgcatgttta...65...attcaattaag	gtagtaa
P.Tro	ctttcttt	tgcatctgctgt...125...tgacaacaccattagctgaAAATTTTCCaTTTCA	attgcaactatgcatgttta...65...attcaattaag	gtagtaa
P.Abe	ctttcttt	tgcatctgctgt...125...tgacaacaccattagctgaAAATTTTCCaTTTCA	attgcaactatgcatgttta...65...attcaattaag	gtagtaa
C.Jac	ctttcttt	tgcatctgctgt...125...tgacaacaccattagctgaAAATTTTCCaTTTCA	attgcaactatgcatgttta...65...attcaattaag	gtagtaa
M.Mus	ctttcttt	tgcatctgctgt...126...tgacaacaccattagctgaAAATTTTCCaTTTCA	attgcaactatgcatgttta...65...attcaattaag	gtagtaa
C.Por	ctttcttt	tgcatctgctgt...125...tgacaacaccattagctgaAAATTTTCCaTTTCA	attgcaactatgcatgttta...65...attcaattaag	gtagtaa
O.Cun	ctttcttt	tgcatctgctgt...125...tgacaacaccattagctgaAAATTTTCCaTTTCA	attgcaactatgcatgttta...65...attcaattaag	gtagtaa
C.Fam	ctttcttt	tgcatctgctgt...125...tgacaacaccattagctgaAAATTTTCCaTTTCA	attgcaactatgcatgttta...65...attcaattaag	gtagtaa
F.Cat	ctttcttt	tgcatctgctgt...125...tgacaacaccattagctgaAAATTTTCCaTTTCA	attgcaactatgcatgttta...65...attcaattaag	gtagtaa
B.Tau	ctttcttt	tgcatctgctgt...125...tgacaacaccattagctgaAAATTTTCCaTTTCA	attgcaactatgcatgttta...65...attcaattaag	gtagtaa
E.Cab	ctttcttt	tgcatctgctgt...125...tgacaacaccattagctgaAAATTTTCCaTTTCA	attgcaactatgcatgttta...65...attcaattaag	gtagtaa
O.Avi	ctttcttt	tgcatctgctgt...125...tgacaacaccattagctgaAAATTTTCCaTTTCA	attgcaactatgcatgttta...65...attcaattaag	gtagtaa
L.Afr	ctttcttt	tgcatctgctgt...125...tgacaacaccattagctgaAAATTTTCCaTTTCA	attgcaactatgcatgttta...65...attcaattaag	gtagtaa
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id=410474 gene=ENSG00000128573 name=FOXP2 segment=chr7_114054329_114054597_1 type=AN

H.Sap	ctat	gaag	tTGAAA	ccGGGAAGTTT	gctcta	acatttccagagaag	gtacgtta
R.Mac	ctat	gaag	tTGAAA	ccGGGAAGTTT	gctcta	acatttccagagaag	gtacgtta
P.Tro	ctat	gaag	tTGAAA	ccGGGAAGTTT	gctcta	acatttccagagaag	gtacgtta
P.Abe	ctat	gaag	tTGAAA	ccGGGAAGTTT	gctcta	acatttccagagaag	gtacgtta
C.Jac	ctat	gaag	tTGAAA	ccGGGAAGTTT	gctcta	acatttccagagaag	gtacgtta
M.Mus	ctat	gaag	tTGAAA	ccGGGAAGTTT	gctcta	acatttccagagaag	gtatgtta
C.Por	ctat	gaag	tTGAAA	ccGGGAAGTTT	ggtcta	acatttccagagaag	gtacgtta
O.Cun	ctat	gaag	tTGAAA	ccGGGAAGTTT	gctcta	acatttccagagaag	gtacgtta
C.Fam	ctat	gaag	tTGAAA	ccGGGAAGTTT	gctcta	acatttcaagagaag	gtacgtta
B.Tau	ctat	gaag	tTGAAA	ccGGGAAGTTT	gctcta	acatttcaagagaag	gtacgtta
E.Cab	ctat	gaag	tTGAAA	ccGGGAAGTTT	gctcta	acatttcaagagaag	gtacgtta
O.Avi	ctat	gaag	tTGAAA	ccGGGAAGTTT	gctcta	acatttcaagagaag	gtacgtta
L.Afr	ctat	gaag	tTGAAA	ccGGGAAGTTT	gctcta	acatttcaagagaag	gtacgtta
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id=410481 gene=ENSG00000128573 name=FOXP2 segment=chr7_114055378_114055415_1 type=AN VIEW

Figure 495:



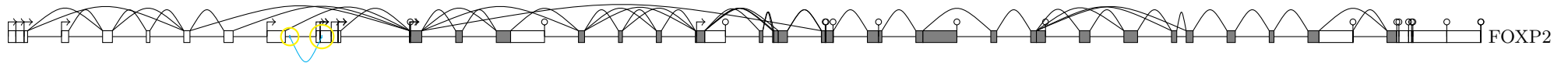
H. Sap	ggctttga	cagtGAGCtAGCTTCTGaG-TTTTccCTTC	--tttttatactgttttctgtg...38...acaaactcctat	gaagtga
R. Mac	ggctttga	cagtGAGCtAGCTTCTGaG-TTTTccCTTC	--tttttatactgttttccgcg...38...acaaactcctat	gaagtga
P. Tro	ggctttga	cagtGAGCtAGCTTCTGaG-TTTTccCTTC	--tttttatactgttttctgcg...38...acaaactcctat	gaagtga
C. Jac	ggctttga	cagtGAGCtAGCTTCTGaG-TTTTccCTTC	--tttttatactgttttccgca...38...acaaactcctat	gaagtga
R. Nor	ggctttga	cagtGAGCtAGCTTCTGaG-TTTTccCTTC	--tttttagactgttttcttt...48...acaaactcctat	gaagtga
C. Por	ggctttga	cagtgaGCTAGCTTCTgaG-TTTTccCTTC	ttttttatactgttttctg--...41...acaaactcctat	gaagtga
O. Cun	ggctttga	cagtGAGCtAGCTTCTGaG-TTTTccCTTC	--tttttatactgttttccgca...38...acaaactcctat	gaagtga
C. Fam	ggctttga	cagtGAGCtAGCTTCTGaG-TTTTccCTTC	--tttttatactgttttccgca...38...acaaactcctat	gaagtga
F. Cat	ggctttga	cagtGAGCtAGCTTCTGaG-TTTTccCTTC	--tttttatactgttttccgca...37...acaaactcctat	gaagtga
B. Tau	ggctttga	cagtGAGCtAGCTTCTGaG-TTTTccCTTC	--tttttatactgttttcagca...37...acaaactcctat	gaagtga
E. Cab	ggctttga	cagtGAGCtAGCTTCTGaG-TTTTccCTTC	--tttttatactgttttccgca...37...acaaactcctat	gaagtga
O. Avi	ggctttga	cagtGAGCtAGCTTCTGaG-TTTTccCTTC	--tttttatactgttttcagc...38...acaaactcctat	gaagtga
L. Afr	ggctttga	cagtGAGCtAGCTTCTGaGTTTTTccCTTC	--tttttatactgttttccaca...38...acaaactcctat	gaagtga
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id=410479 gene=ENSG00000128573 name=FOXP2 segment=chr7_114055275_114055373.1 type=AN

H. Sap	ctat	GAAG	ttGAAACCGGGaAGTTtGCTC	taacatttcagagaag	gtacgtta
R. Mac	ctat	GAAG	ttGAAACCGGGaAGTTtGCTC	taacatttcagagaag	gtacgtta
P. Tro	ctat	GAAG	ttGAAACCGGGaAGTTtGCTC	taacatttcagagaag	gtacgtta
C. Jac	ctat	GAAG	ttGAAACCGGGaAGTTtGCTC	taacatttcagagaag	gtacgtta
R. Nor	ctat	GAAG	ttGAAACCGGGaAGTTtGCTC	taacatttcagagaag	gtacgtta
C. Por	ctat	GAAG	ttGAAACcgGGAAGtTTGGT	taacatttcagagaag	gtacgtta
O. Cun	ctat	GAAG	ttGAAACCGGGaAGTTtGCTC	taacatttcagagaag	gtacgtta
C. Fam	ctat	GAAG	ttGAAACCGGGaAGTTtGCTC	taacattcaagagaag	gtacgtta
F. Cat	ctat	GAAG	ttGAAACCGGGaAGTTtGCTC	taacattcaagagaag	gtacgtta
B. Tau	ctat	GAAG	ttGAAACCGGGaAGTTtGCTC	taacattcaagagaag	gtacgtta
E. Cab	ctat	GAAG	ttGAAACCGGGaAGTTtGCTC	taacattcaagagaag	gtacgtta
O. Avi	ctat	GAAG	ttGAAACCGGGaAGTTtGCTC	taacattcaagagaag	gtacgtta
L. Afr	ctat	GAAG	ttGAAACCGGGaAGTTtGCTC	taacattcaagagaag	gtacgtta
	****	****	*****	*****	*****

id=410481 gene=ENSG00000128573 name=FOXP2 segment=chr7_114055378_114055415.1 type=AN VIEW

Figure 497:



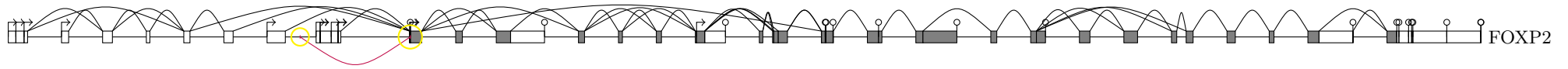
H. Sap	caattaag	gttagtaattgatgggatctagtgttcaaagg:::-----	TCTGct	TGGACAaATTGT	-----cattgtgaagtggttttgat...355...tgctggctcagt	cttgaacc
R. Mac	caattaag	gttagtaattgatgggatctagtgttcaaagg:::-----	TCTGct	TGGACAaATTGT	-----cattgtgaagtggttttgat...367...tgctggctcagt	cttgaacc
P. Tro	caattaag	gttagtaattgatgggatctagtgttcaaagg:::-----	TCTGct	TGGACAaATTGT	-----cattgtgaagtggttttgat...355...tgctggctcagt	cttgaacc
P. Abe	caattaag	gttagtaattgatgggatctagtgttcaaagg:::-----	TCTGct	TGGACAaATTGT	-----cattgtgaagtggttttgat...349...tgctggctcagt	cttgaacc
C. Jac	caattaag	gttagtaattgatgggatctagtgttcaaagg:::-----	TCTGct	TGGACAaATTGT	-----cattgtgaagtggttttgat...361...tgctggctcagt	cttgaacc
M. Mus	caattaag	gttagtaattgatgggatctagcgttcaaaga:::atgcttgtcttgatttgctattttgtgtaactacttcc	TTTGGCTG	--taAATTGcAGTG	cactggagccttaccaaaag...275...tgctggctcagt	cttgaacc
R. Nor	caattaag	gttagtaattgatgggatctcgcttcaaagg:::-----	TCTGct	TGGACAaATTGT	-----cattgtgaagtggttttgat...421...tgctggctcagt	cttgaacc
C. Por	caattaag	gttagtaattgatgggatctagtgttcaaagg:::-----	TCTGct	TGGACAaATTGT	-----cattgtgaagtggttttgat...356...tgctggctcagt	cttgaacc
O. Cun	caattaag	gttagtaattgatgggatctagtgttcaaagg:::-----	TCTGct	TGGACAaATTGT	-----cattgtgaagtggttttgat...372...tgctggctcagt	cttgaacc
C. Fam	caattaag	gttagtaattgatgggatctagtgttcaaagg:::-----	TCTGct	TGGACAaATTGT	-----cattgtgaagtggttttgat...436...tgctggctcagt	cttgaacc
F. Cat	caattaag	gttagtaattgatgggatctagtgttcaaagg:::-----	TCTGct	TGGACAaATTGT	-----cattgtgaagtggttttgat...428...tgctggctcagt	cttgaacc
B. Tau	caattaag	gttagtaattgatgggatctagggttcaaagg:::-----	TCTGct	TGGACAaATTGT	-----cattgtgaagtggttttgat...357...tgctggctcagt	cttgaacc
E. Cab	caattaag	gttagtaattgatgggatctagtgttcaaagg:::-----	TCTGct	TGGACAaATTGT	-----cattgtgaagtggttttgat...388...tgctggctcagt	cttgaacc
O. Avi	caattaag	gttagtaattgatgggatctagtgttcaaagg:::-----	TCTGct	TGGACAaATTGT	-----cattgtgaagtggttttgat...348...tgctggctcagt	cttgaacc
L. Afr	caattaag	gttagtaattgatgggatctagtgttcaaagg:::-----	TCTGct	TGGACAaATTGT	-----cattgtgaagtggttttgat...403...tgctggctcagt	cttgaacc
	*****	***** * *****		* ** ** ***** ** * *		*****

id=410475 gene=ENSG00000128573 name=FOXP2 segment=chr7_114054598.114055051.1 type=IN

H. Sap	aaatg	ctg	atthttgtgt-----	ACGATTGTC	---CACGGA	cgccaaaacaatcacagagc-----	...106...tggtggccttga	cagtgagc
R. Mac	aaatg	ctg	atthttgtgt-----	ACGATTGTC	---CACGGA	cgccaaaacaatcacagagc-----	...106...tggtggccttga	cagtgagc
P. Tro	aaatg	ctg	atthttgtgt-----	ACGATTGTC	---CACGGA	cgccaaaacaatcacagagc-----	...106...tggtggccttga	cagtgagc
P. Abe	aaatg	ctg	atthttgtgt-----	ACGATTGTC	---CACGGA	cgctaaaacaatcacagagc-----	...106...tggtggccttga	cagtgagc
C. Jac	aaatg	ctg	atthttgtgt-----	ACGATTGTC	---CACGGA	cgccaaaacaatcacagagc-----	...106...tggtggccttga	cagtgagc
M. Mus	aaatg	ctg	atthttgtgtacagagtgtccacggacgccccaaaacaatcacagagctgcctgattTGT	TAATTacCAGCa	CAAAA	----atgccatcagtgtggacgt...56...tggtggccttga	cagtgagc	
R. Nor	aaatg	ctg	atthttgtgt-----	ACGATTGTC	---CACGGA	cgccaaaacaatcacagagc-----	...106...cggtggccttga	cagtgagc
C. Por	aaatg	ctg	atgthttgtgt-----	ACGATTGTC	---CACGGA	cgccaaaacaatcacagagc-----	...106...tggtggccttga	cagtgagc
O. Cun	aaatg	ctg	atthttgtgt-----	ACGATTGTC	---CACGGA	cgccaaaacaatcacagagc-----	...106...tggtggccttga	cagtgagc
C. Fam	aaatg	ctg	atthttgtgt-----	ACGATTGTC	---CACGGA	cgccaaaacaatcacagagc-----	...106...tggtggccttga	cagtgagc
F. Cat	aaatg	ctg	atthttgtgt-----	ACGATTGTC	---CACGGA	cgccaaaacaatcacagagc-----	...106...tggtggccttga	cagtgagc
B. Tau	aaatg	ctg	atthttgtgt-----	ACGATTGTC	---CACGGA	cgccaaaacaatcacagagc-----	...106...tggtggccttga	cagtgagc
E. Cab	aaatg	ctg	atthttgtgt-----	ACGATTGTC	---CACGGA	cgccaaaacaatcacagagc-----	...106...tggtggccttga	cagtgagc
O. Avi	aaatg	ctg	atthttgtgt-----	ACGATTGTC	---CACGGA	cgccaaaacaatcacagagc-----	...106...tggtggccttga	cagtgagc
L. Afr	aaatg	ctg	atthttgtgt-----	ACGATTGTC	---CACGGA	cgccaaaacaatcacagagc-----	...106...tggtggccttga	cagtgagc
	****	*** ** *****		* * * ** * * * ***** * *		*****	*****	

id=410478 gene=ENSG00000128573 name=FOXP2 segment=chr7_114055113.114055274.1 type=AN VIEW

Figure 498:



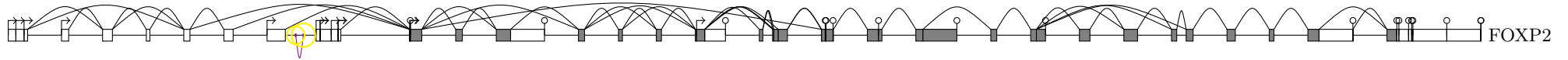
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R.Mac	caattaag	gttagtaattga...172...gtaaattgcagagcactgga	GCTTTACCAAAAGT	gcagtgataatg	gtaagct...216...tgctggctcagt	cttgaacc
P.Tro	caattaag	gttagtaattga...172...gtaaattgcagagcactgga	GCTTTACCAAAAGT	gcagtgataatg	gtaagct...204...tgctggctcagt	cttgaacc
P.Abe	caattaag	gttagtaattga...172...gtaaattgcagagcactgga	GCTTTACCAAAAGT	gcagtgataatg	gtaagct...198...tgctggctcagt	cttgaacc
C.Jac	caattaag	gttagtaattga...172...gtaaattgcagagcactgga	GCTTTACCAAAAGT	gcagtgataatg	gtaagct...210...tgctggctcagt	cttgaacc
M.Mus	caattaag	gttagtaattga...172...gtaaattgcagagcactgga	GCTTTACCAAAAGT	gcagtgataatg	gtaagct...254...tgctggctcagt	cttgaacc
C.Por	caattaag	gttagtaattga...172...gtaaattgcagagcactgga	GCTTTACCAAAAGT	gcagtgataatg	gtaagct...205...tgctggctcagt	cttgaacc
O.Cun	caattaag	gttagtaattga...172...gtaaattgcagagcactgga	GCTTTACCAAAAGT	gcagtgataatg	gtaagct...221...tgctggctcagt	cttgaacc
C.Fam	caattaag	gttagtaattga...172...gtaaattgcagagcactgga	GCTTTACCAAAAGT	gcagtgataatg	gtaagct...285...tgctggctcagt	cttgaacc
F.Cat	caattaag	gttagtaattga...172...gtaaattgcagagcactgga	GCTTTACCAAAAGT	gcagtgataatg	gtaagct...277...tgctggctcagt	cttgaacc
B.Tau	caattaag	gttagtaattga...172...gtaaattgcagagcactgga	GCTTTACCAAAAGT	gcagtgataatg	gtaagct...206...tgctggctcagt	cttgaacc
E.Cab	caattaag	gttagtaattga...172...gtaaattgcagagcactgga	GCTTTACCAAAAGT	gcagtgataatg	gtaagct...237...tgctggctcagt	cttgaacc
L.Afr	caattaag	gttagtaattga...172...gtaaattgcagagcactgga	GCTTTACCAAAAGT	gcagcatataatg	gtaagct...252...tgctggctcagt	cttgaacc
	*****	*****	*****	*****	*****	*****

id=410475 gene=ENSG00000128573 name=FOXP2 segment=chr7_114054598_114055051.1 type=IN

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R.Mac	aCTTTT	aG	GTAttAAGT	catg	atgc
P.Tro	aCTTTT	aG	GTAttAAGT	catg	atgc
P.Abe	aCTTTT	aG	GTAttAAGT	catg	atgc
C.Jac	aCTTTT	aG	GTAttAAGT	catg	atgc
M.Mus	gCTTTT	aG	GTAttAAGT	catg	atgc
C.Por	aCTTTT	aG	GTAttAAGT	catg	atgc
O.Cun	aCTTTT	aG	GTAttAAGT	catg	atgc
C.Fam	aCTTTT	aG	GTAttAAGT	catg	atgc
F.Cat	aCTTTT	aG	GTAttAAGT	catg	atgc
B.Tau	aCTTTT	aG	GTAttAAGT	catg	atgc
E.Cab	aCTTTT	aG	GTAttAAGT	catg	atgc
L.Afr	aCTTTT	aG	GTAttAAGT	catg	atgc
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id=410484 gene=ENSG00000128573 name=FOXP2 segment=chr7_114066557_114066565.1 type=EN VIEW

Figure 499:



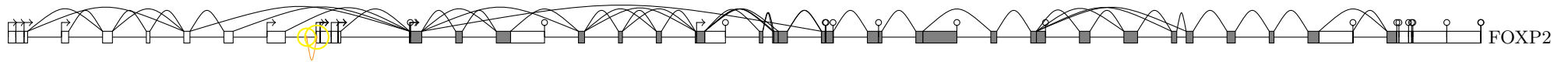
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R. Mac	caattaag	gtagtaattga...99...-----	ggcttatctgatggttggc	TGTGAAATGCTTg	TCTTGg	GTTTg	CTTA	at	ttttgtaaactacttcctt...275...tgctggctcagt	cttgaacc
P. Tro	caattaag	gtagtaattga...99...-----	ggcttatctgatggttggc	TGTGAAATGCTTg	TCTTGg	GTTTg	CTTA	at	ttttgtaaactacttcctt...263...tgctggctcagt	cttgaacc
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C. Jac	caattaag	gtagtaattga...99...-----	ggcttatctgatggttggc	TGTGAAATGCTTg	TCTTGg	GTTTg	CTTA	at	ttttgtaaactacttcctt...269...tgctggctcagt	cttgaacc
M. Mus	caattaag	gtagtaattga...92...tctttctggc	tatctgatggttggc	TGTGAAATGCTTg	TCTTGg	GTTTg	CTTA	at	ttttgtaaactacttcctt...323...tgctggctcagt	cttgaacc
C. Por	caattaag	gtagtaattga...99...-----	ggcttatctgatggttggc	TGTGAAATGCTTg	TCTTGg	GTTTg	CTTA	at	ttttgtaaactacttcctt...264...tgctggctcagt	cttgaacc
O. Cun	caattaag	gtagtaattga...99...-----	ggcttatctgatggttggc	TGTGAAATGCTTg	TCTTGg	GTTTg	CTTA	at	ttttgtaaactacttcctt...280...tgctggctcagt	cttgaacc
C. Fam	caattaag	gtagtaattga...99...-----	ggcttatctgatggttggc	TGTGAAATGCTTg	TCTTGg	GTTTg	CTTA	at	ttttgtaaactacttcctt...344...tgctggctcagt	cttgaacc
F. Cat	caattaag	gtagtaattga...99...-----	ggcttatctgatggttggc	TGTGAAATGCTTg	TCTTGg	GTTTg	CTTA	at	ttttgtaaactacttcctt...336...tgctggctcagt	cttgaacc
B. Tau	caattaag	gtagtaattga...92...tctttctggc	tatctgatggttggc	TGTGAAATGCTTg	TCTTGg	GTTTg	CTTA	at	ttttgtaaactacttcctt...275...tgctggctcagt	cttgaacc
E. Cab	caattaag	gtagtaattga...99...-----	ggcttatctgatggttggc	TGTGAAATGCTTg	TCTTGg	GTTTg	CTTA	at	ttttgtaaactacttcctt...296...tgctggctcagt	cttgaacc
O. Avi	caattaag	gtagtaattga...99...-----	ggcttatctgatggttggc	TGTGAAATGCTTg	TCTTGg	GTTTg	CTTA	at	ttttgtaaactacttcctt...256...tgctggctcagt	cttgaacc
L. Afr	caattaag	gtagtaattga...99...-----	ggcttatctgatggttggc	TGTGAAATGCTTg	TCTTGg	GTTTg	CTTA	at	ttttgtaaactacttcctt...311...tgctggctcagt	cttgaacc
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

id=410475 gene=ENSG00000128573 name=FOXP2 segment=chr7_114054598_114055051.1 type=IN

H. Sap	caattaag	gtagtaattga...214...taatg	taagccttgctctaa	TAAGgg	AAGCAAGAAGTGTATTTATCACA	gacatgaa	gctaaccgagg-----	...147...tgctggctcagt	cttgaacc
R. Mac	caattaag	gtagtaattga...214...taatg	taagccttgctctaa	TAAGgg	AAGCAAGAAGTGTATTTATCACA	gacatgaa	gctaaccgagg-----	...159...tgctggctcagt	cttgaacc
P. Tro	caattaag	gtagtaattga...214...taatg	taagccttgctctaa	TAAGgg	AAGCAAGAAGTGTATTTATCACA	gacatgaa	gctaaccgagg-----	...147...tgctggctcagt	cttgaacc
P. Abe	caattaag	gtagtaattga...214...taatg	taagccttgctctaa	TAAGgg	AAGCAAGAAGTGTATTTATCACA	gacatgaa	gctaaccgagg-----	...141...tgctggctcagt	cttgaacc
C. Jac	caattaag	gtagtaattga...214...taatg	taagccttgctctaa	TAAGgg	AAGCAAGAAGTGTATTTATCACA	gacatgaa	gctaaccgagg-----	...153...tgctggctcagt	cttgaacc
M. Mus	caattaag	gtagtaattga...223...-----	gcttctcctaataag	gggaagCAAGAAGT	gtATTTatCACAGaCATGA	aagctaacc	gaggacttgag...190...tgctggctcagt	cttgaacc	
C. Por	caattaag	gtagtaattga...214...taatg	taagccttgctctaa	TAAGgg	AAGCAAGAAGTGTATTTATCACA	gacatgaa	gctaaccgagg-----	...148...tgctggctcagt	cttgaacc
O. Cun	caattaag	gtagtaattga...214...taatg	taagccttgctctaa	TAAGgg	AAGCAAGAAGTGTATTTATCACA	gacatgaa	gctaaccgagg-----	...164...tgctggctcagt	cttgaacc
C. Fam	caattaag	gtagtaattga...214...taatg	taagccttgctctaa	TAAGgg	AAGCAAGAAGTGTATTTATCACA	gacatgaa	gctaaccgagg-----	...228...tgctggctcagt	cttgaacc
F. Cat	caattaag	gtagtaattga...214...taatg	taagccttgctctaa	TAAGgg	AAGCAAGAAGTGTATTTATCACA	gacatgaa	gctaaccgagg-----	...220...tgctggctcagt	cttgaacc
B. Tau	caattaag	gtagtaattga...223...-----	gcttctcctaataag	gggaagCAAGAAGT	atATTTatCACAGaCATGA	aagctaacc	gaggacttgag...142...tgctggctcagt	cttgaacc	
E. Cab	caattaag	gtagtaattga...214...taatg	taagccttgctctaa	TAAGgg	AAGCAAGAAGTGTATTTATCACA	gacatgaa	gctaaccgagg-----	...180...tgctggctcagt	cttgaacc
O. Avi	caattaag	gtagtaattga...215...taatg	taagccttgctctaa	TAAGgg	AAGCAAGAAGTGTATTTATCACA	gacatgaa	gctaaccgagg-----	...139...tgctggctcagt	cttgaacc
L. Afr	caattaag	gtagtaattga...214...taatg	taagccttgctctaa	TAAGgg	AAGCAAGAAGTGTATTTATCACA	gacatgaa	gctaaccgagg-----	...195...tgctggctcagt	cttgaacc
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

id=410475 gene=ENSG00000128573 name=FOXP2 segment=chr7_114054598_114055051.1 type=IN VIEW

Figure 500:



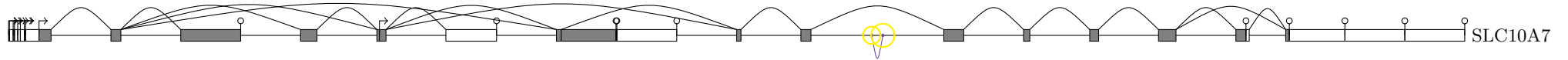
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R. Mac	caattaag	gttagtaattga...268...	gaaagctaaccgaggacttg	AGAGAc	TCAAACCTGG	tgcttttgtctctctctctc-	...119...	tgctggctcagt	cttgaacc
P. Tro	caattaag	gttagtaattga...268...	gaaagctaaccgaggacttg	AGAGAc	TCAAACCTGG	tgcttttgtctctctctctc-	...107...	tgctggctcagt	cttgaacc
P. Abe	caattaag	gttagtaattga...268...	gaaagctaaccgaggacttg	AGAGAc	TCAAACCTGG	tgcttttgtctctctctctc-	...101...	tgctggctcagt	cttgaacc
C. Jac	caattaag	gttagtaattga...268...	gaaagctaaccgaggacttg	AGAGAc	TCAAACCTGG	tgcttttgtctctctctctc-	...113...	tgctggctcagt	cttgaacc
M. Mus	caattaag	gttagtaattga...268...	gaaagctaaccgaggacttg	AGAGAc	TCAAACCTGG	-tctctctctctctctctct	...157...	tgctggctcagt	cttgaacc
R. Nor	caattaag	gttagtaattga...268...	gaaagctaaccgaggacttg	AGAGAc	TCAAACCTGG	tgcttctctctctctctctc-	...173...	tgctggctcagt	cttgaacc
C. Por	caattaag	gttagtaattga...268...	gaaagctaaccgaggacttg	AGAGAc	TCAAACCTGG	-gcttctctctctctctct	...108...	tgctggctcagt	cttgaacc
O. Cun	caattaag	gttagtaattga...268...	gaaagctaaccgaggacttg	AGAGAc	TCAAACCTGG	tgctttt-tttttgtctctct	...124...	tgctggctcagt	cttgaacc
C. Fam	caattaag	gttagtaattga...268...	gaaagctaaccgaggacttg	AGAGAc	TCAAACCTGG	tgctttt-cttttttttttct	...188...	tgctggctcagt	cttgaacc
F. Cat	caattaag	gttagtaattga...268...	gaaagctaaccgaggacttg	AGAGAc	TCAAACCTGG	tgctttt-ctttttttttttt	...180...	tgctggctcagt	cttgaacc
B. Tau	caattaag	gttagtaattga...268...	gaaagctaaccgaggacttg	AGAGAc	TCAAACCTGG	tgctttt-ttttttttcctg	...109...	tgctggctcagt	cttgaacc
E. Cab	caattaag	gttagtaattga...268...	gaaagctaaccgaggacttg	AGAGAc	TCAAACCTGG	tgctttt-ttttttttgaca	...140...	tgctggctcagt	cttgaacc
O. Avi	caattaag	gttagtaattga...269...	gaaagctaaccgaggacttg	AGAGAc	TCAAACCTGG	tgctttt-tttttttcgact	...99...	tgctggctcagt	cttgaacc
L. Afr	caattaag	gttagtaattga...268...	gaaagctaaccgaggacttg	AGAGAc	TCAAACCTGG	tgctttt-tttgacacacaca	...155...	tgctggctcagt	cttgaacc
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id=410475 gene=ENSG00000128573 name=FOXP2 segment=chr7_114054598.114055051.1 type=IN

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R. Mac	ggcTCAGT	cTTGAacCTTT	gtcaccctcacgttg	cacaccaaagacata	accctagtgattaatg	ctgatttt
P. Tro	ggcTCAGT	cTTGAacCTTT	gtcaccctcacgttg	cacaccaaagacata	accctagtgattaatg	ctgatttt
P. Abe	ggcTCAGT	cTTGAacCTTT	gtcaccctcacgttg	cacaccaaagacata	accctagtgattaatg	ctgatttt
C. Jac	ggcTCAGT	cTTGAacCTTT	gtcaccctcacgttg	cacaccaaagacata	accctagtgattaatg	ctgatttt
M. Mus	ggcTCAGT	cTTGAacCTTT	gtcaccctca-gttg	cacaccaaagacata	accctagtgattaatg	ctgatttt
R. Nor	ggcTCAGT	cTTGAacCTTT	gtcaccctca-gttg	cacaccaaagacata	accctagtgattaatg	ctgatttt
C. Por	ggcTCAGT	cTTGAacCTTT	gtcaccctcacgttg	cacaccaaagacata	accctagtgattaatg	ctgatggt
O. Cun	ggcTCAGT	cTTGAacCTTT	gtcaccctcacgttg	cacaccaaagacata	accctagtgattaatg	ctgatttt
C. Fam	ggcTCAGT	cTTGAacCTTT	gtcaccctcacgttg	cacaccaaagacata	accctagtgattaatg	ctgatttt
F. Cat	ggcTCAGT	cTTGAacCTTT	gtcaccctcacgttg	cacaccaaagacata	accctagtgattaatg	ctgatttt
B. Tau	ggcTCAGT	cTTGAacCTTT	gtcaccctcacgttg	cacaccaaagacata	accctagtgattaatg	ctgatttt
E. Cab	ggcTCAGT	cTTGAacCTTT	gtcaccctcacgttg	cacaccaaagacata	accctagtgattaatg	ctgatttt
O. Avi	ggcTCAGT	cTTGAacCTTT	gtcaccctcacgttg	cacaccaaagacata	accctagtgattaatg	ctgatttt
L. Afr	ggcTCAGT	cTTGAacCTTT	gtcaccctcacgttg	cacaccaaagacata	accctagtgattaatg	ctgatttt
	*****	*****	*****	*****	*****	***** **

id=410476 gene=ENSG00000128573 name=FOXP2 segment=chr7_114055052.114055109.1 type=AN VIEW

Figure 501:



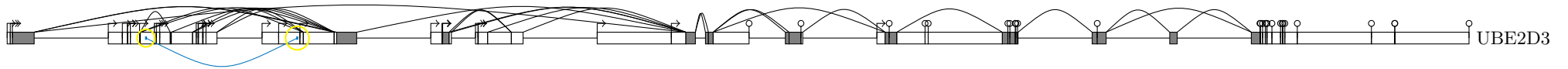
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R. Mac	ttggacag	gtaaggcctcca...4557...ttcttgaagatgtcagatt	TTAAGaTTCCCAAAGTT	gcacttggaaattgtctgttg-----	..351..	tctgtatttcag	attgtccg
P. Tro	ttggacag	gtaaggcctcca...4557...ttcttgaagatgtcagatt	TTAAGaTTCCCAAAGTT	gcacttggaaattgtctgttg-----	..351..	tctgtatttcag	attgtccg
P. Abe	ttggacag	gtaaggcctcca...4557...ttcttgaagatgtcagatt	TTAAGaTTCCCAAAGTT	gcacttggaaattgtctgttg-----	..351..	tctgtatttcag	attgtccg
C. Jac	ttggacag	gtaagacctcca...4557...ttcttgaagatgtcagatt	TTAAGaTTCCCAAAGTT	gcacttggaaattgtctgttg-----	..351..	tctgtatttcag	attgtccg
M. Mus	ttggacag	gtaaggttctct...4558...ttcttgaagatgtcagatt	TTAAGaTTCCCAAGT	cgacttggaaattgtctgttg-----	..351..	tctgtgttcag	atcgtccg
C. Por	ttggacag	gtaagttctcca...4557...ttcttgaagatgtcagatt	TTAAGaTTCCCAAAGTTGT	acttggaaattgtctgtcag-----	..349..	tctgtgttcag	atcgtccg
D. Cun	ttggacag	gtaagatctcca...4557...ttcttgaagatgtcagatt	TTAAGaTTCCCAAAGTT	gcacttggaaattgtctgtcg-----	..351..	tctgtgttcag	attgtccg
C. Fam	ttggacag	gtaaggtctcca...4558...ttcttgaagatgtcagatt	TTAAGaTTCCCAAAGTT	gcacttggaaattgtctgttg-----	..350..	tctgtatttcag	atcttccg
F. Cat	ttggacag	gtaaggtctccc...4558...ttcttgaagatgtcagatt	TTAAGaTTCCCAAAGTT	gcacttggaaattgtctgttg-----	..350..	tctatgttcag	atcgtccg
B. Tau	ttggacag	gtaaggtctcca...4565...ttcttgaagatgtcagatt	TTAAGaTTCCCAAAGTT	acacttggcgtgtctgttg-----	..343..	tctgtgttcag	attgtccg
E. Cab	ttggacag	gtaaggtctcta...4557...ttcttaaagatgtcagatt	TTAAGaTTCCCAAAGTTgc	ACTTggaattgtctgttgaggcag..	345..	tctgtatttcag	atcgtccg
S. Sus	ttggacag	gtaaggtctcca...4560...ttcttgaagatgtcagatt	TTAAGaTTCCCAAAGTT	gcacttggaaattgtctgttg-----	..348..	tctgtgttcag	attgtccg
O. Avi	ttggacag	gtaaggtctcca...4566...ttcttgaagatgtcagatt	TTAAGaTTCCCAAAGTT	gcacttggagttgtctgttg-----	..342..	tgtgtgttcag	attgtccg
L. Afr	ttggtcag	gtaagatcttct...4557...ttcttgaagatgtcagatt	TTAAGaTTCCCAAAGTTGT	acttggaaattgtctgttgag----	..349..	tctgtatttcag	attgtccg
	**** **	*****	***** ** *****	***** *****		* * * * **	** ****

id=366838 gene=ENSG00000120519 name=SLC10A7 segment=chr4_147215248_147227077_-1 type=IN

H. Sap	ttggacag	gtaaggcctcca...4649...-----taggatcagcagaggagata	AACTTTGGGAGgTTAA	tgggcatgtctcagtgacag..	258..	tctgtatttcag	attgtccg
R. Mac	ttggacag	gtaaggcctcca...4649...-----taggatcagcagaggagata	AACTTTGGGAGgCTTAA	tgggcatgtctcagtgacag..	258..	tctgtatttcag	attgtccg
P. Tro	ttggacag	gtaaggcctcca...4649...-----taggatcagcagaggagata	AACTTTGGGAGgCTTAA	tgggcatgtctcagtgacag..	258..	tctgtatttcag	attgtccg
P. Abe	ttggacag	gtaaggcctcca...4649...-----taggatcagcagaggagata	AACTTTGGGAGgCTTAA	tgggcatgtctcagtgacag..	258..	tctgtatttcag	attgtccg
C. Jac	ttggacag	gtaagacctcca...4649...-----taggatcagcagaggagata	AACTTTGGGAGgCTTAA	tgggcatgtctcagtgacag..	258..	tctgtatttcag	attgtccg
M. Mus	ttggacag	gtaaggttctct...4650...-----ta-cagcagcagaggacataa	ACTTGGGGAggCTTAA	tgggcatgtctcagtgacag..	258..	tctgtgttcag	atcgtccg
C. Por	ttggacag	gtaagttctcca...4646...--cattagatcgccagaggag	ATAAACTTTGGGAGgCTTAA	tgggcatgtctcagtgacag..	258..	tctgtgttcag	atcgtccg
D. Cun	ttggacag	gtaagatctcca...4649...-----taggatcagcagaggagata	AACTTTGGGAGgCTTAA	tgggcatgtctcagtgacag..	258..	tctgtgttcag	attgtccg
C. Fam	ttggacag	gtaaggtctcca...4650...-----taggatcagcagaggagata	AACTTTGGGAGgCTTAA	tgggcatgtctcagtgacag..	257..	tctgtatttcag	atcttccg
F. Cat	ttggacag	gtaaggtctccc...4650...-----taggatcagcagaggagata	AACTTTGGGAGgCTTAA	tgggcatgtctcagtgacag..	257..	tctatgttcag	atcgtccg
B. Tau	ttggacag	gtaaggtctcca...4657...-----taggatcagcagaggagata	AACTTTGGGAGgCTTAA	tgggcatgtctcagtgacag..	250..	tctgtgttcag	attgtccg
E. Cab	ttggacag	gtaaggtctcta...4644...tccattagatcagcagagg	AGGTAACTTTGGGAGgCTTAA	tgggcatgtctcagtgacag..	258..	tctgtatttcag	atcgtccg
S. Sus	ttggacag	gtaaggtctcca...4652...-----taggagcagcagaggagata	AACTTTGGGAGgCTTAA	tgggcatgtctcagtgacag..	255..	tctgtgttcag	attgtccg
O. Avi	ttggacag	gtaaggtctcca...4658...-----taggatcagcagaggagata	AACTTTGGGAGgCTTAA	tgggcatgtctcagtgacag..	249..	tgtgtgttcag	attgtccg
L. Afr	ttggtcag	gtaagatcttct...4646...--cattagatcagcagaggag	ATAAACTTTGGGAGgCTTAA	tgggcatgtctcagtgacag..	258..	tctgtatttcag	attgtccg
	**** **	*****	** * * ***** ***** ***** ***** *****	***** *****		* * * * **	** ****

id=366838 gene=ENSG00000120519 name=SLC10A7 segment=chr4_147215248_147227077_-1 type=IN VIEW

Figure 502:



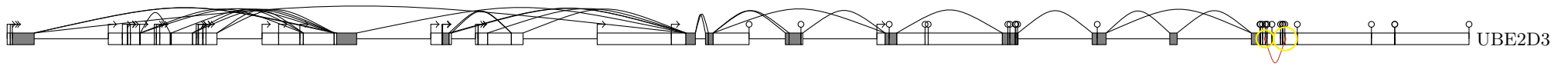
H. Sap	gat	acc	gtgagga	actggggg	acgc	TGTGGGGAGGGG	CGTGGG	g-ctggatcgcgcagcggctgcttcctttacct-----	tcctcccatggtctccttccggtt	ctcgatgc
R. Mac	aat	acc	gtgagga	actggggg	acgc	TGTGGGGAGGGG	CGTGGG	g-ctggatcgcgcagcggcagcttcctttacct-----	tcctcccatggtctccttccggtt	ctcgatgc
P. Tro	gat	acc	gtgagga	actggggg	acgc	TGTGGGGAGGGG	CGTGGG	g-ctggatcgcgcagcggctgcttcctttacct-----	tcctcccatggtctccttccggtt	ctcgatgc
P. Abe	aat	acc	gtgagga	actggggg	acgc	TGTGGGGAGGGG	CGTGGG	g-ctagatcgcgca-ctgcccttcctttacct-----	tcctcccatggtctccttccggtt	ctcgatgc
C. Jac	aat	acc	gtgagga	actggggg	acgc	TGTGGGGAGGGG	CGTGGG	g-cttgatcgcgcagcggctgcttcctttacct-----	tcctcccatggtctccttccggtt	ctcgatgc
M. Mus	cat	cc	gtgagga	aacggggg	ccac	-tcaGGGAGGGG	CGTGGG	gcctcgaccgcgcagctgccgcttcattacct-----	tcctcctaaggtctccttccggtt	ctcgatgc
R. Nor	cat	cc	gtgagga	aacggggg	ccac	taGGGAGGGG	CGTGGG	gcctcaaccgcgcagctgccgcttcattacct-----	tcctcctaaggtctccttccggtt	ctcgatgc
O. Cun	cat	acc	gtgagga	taccgagg	gacgc	TGTGGGGAGGGG	CGTGGG	g-caccagcgcgcagctgtcgttcattacct-----	tcctcccatggtctccttccggtt	ctcgatgc
C. Fam	aat	cc	gtgagga	aacggggg	acgc	GGGAGGGG	CGTGGG	g-ctcgaccgcgcagctgccgcttcattacct-----	tcctcccagggtccccttccggtt	ctcgatgc
F. Cat	aat	acc	gtgagga	aatggggg	atgctgct	GGGAGGGG	CGTGGG	g-ctcaatcgcgcagctgccgcttcattacct-----	tcctcccatggtctccttccggtt	ctcgatgc
B. Tau	aat	acc	gtgagga	aacggggg	acactttc	GGGAGGGG	CGTGGG	g-cgcgatcgcgcagctgccgcttcattacct-----	tcctgccatggtctccttccggtt	ctcgatgc
S. Sus	aat	acc	gtgagga	aatggggg	acgctttc	GGGAGGGG	CGTGGG	g-ctcgaccgcgcagctgccgcttcattacct-----	tcctcccatggtctccttccggtt	ctcgatgc
O. Avi	aat	acc	gtgagga	aatcgggg	acactttc	GGGAGGGG	CGTGGG	g-cgcgatcgcgcagctgccgcttcattacct-----	tcctgccatggtctccttccggtt	ctcgatgc
L. Afr	aat	acc	gtgagga	aacgct	-----	GGGAGGGG	CGTGGG	g-accgaccgcgcagctgccgcttcattaccttcctccatggactccttccatggactccttccggtt	ctcgatgc	
	**	***	*****	* *		*****		***** * * * * *	*** * * * * *	*****

id=398671 gene=ENSG00000109332 name=UBE2D3 segment=chr4.103749007.103749100.-1 type=AN

H. Sap	gtccgtcc	ggagtcttatgc...79...	-gctccggaccctgccccgca	CCCACCCCT	TCTC	TACG	cctcttctctcc	caccggg
R. Mac	gtccgtcc	ggagtcttatgc...79...	-gctccggaccctgccccgca	CCCACCCCT	TCTC	TACG	cctcttctctcc	caccggg
P. Tro	gtccgtcc	ggagtcttatgc...79...	-gctccggaccctgccccgca	CCCACCCCT	TCTC	TACG	cctcttctctcc	caccggg
P. Abe	gtccgtcc	ggagtcttatgc...79...	-gctccggaccctgccccgca	CCCACCCCT	TCTC	TACG	cctcttctctcc	caccggg
C. Jac	gtccatcc	tgagtctcttgc...78...	-gctccggaccctgccccgca	CCCACCCCT	TCTC	TACG	cctcttctctcc	caccggg
M. Mus	gtccgtcc	ggagccgcccgc...76...	-gctctggaccctgccccgca	CCCACCCCT	TCTC		ctccgctcttctctcc	caccggg
R. Nor	gtccgtcc	ggagcctcccgc...76...	-gctctggaccctgccccgca	CCCACCCCT	TCTC		ctccgctcttctctcc	caccggg
O. Cun	ggcagccc	gcaactcccctgc...79...	-gccccggaccctgccccgca	CCCACCCCT	TCTC	TACG	cctcttctctcc	caccggg
C. Fam	gtcagtc	ggagcctcagc...79...	ggctccggaccctgccccgc	ACCACCCCT	TCTC		ctacgctcttctctcc	caccggg
F. Cat	agaagtcc	ggagtctcctgt...79...	-gctccggaccctgccccgca	CCCACCCCT	TCTC		ctacgctcttctctcc	caccggg
B. Tau	gtctgtcc	ggagtctcctgt...79...	-gccccggaccctgccccgca	CCCACCCCT	TCTC		ctccgctcttctctcc	caccggg
S. Sus	gacggtcc	ggagtctcctgt...78...	-gccccggaccctgccccgca	CCCACCCCT	TCTC		ctacgctcttctctcc	caccggg
O. Avi	gtcagtc	ggaggctcccgt...78...	-gccccggaccctgccccgca	CCCACCCCT	TCTC		ctccgctcttctctcc	caccggg
L. Afr	gtgagtc	ggagtctcctgt...80...	-gctccggaccctgccccgca	CCCACCCCT	TCTC		ctacgctcttctctcc	caccggg
	**	* * *		***	*****	*****	*****	*****

id=398686 gene=ENSG00000109332 name=UBE2D3 segment=chr4.103748025.103748167.-1 type=AN VIEW

Figure 503: CS=4.2



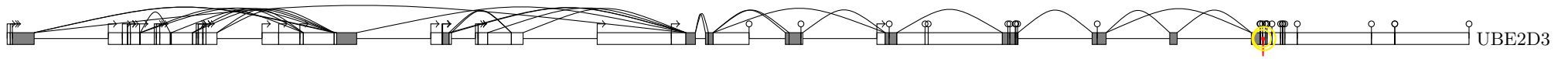
H. Sap	cctgcatt	atAGCTGGAAtaAACTTt	aaattact
R. Mac	cctgcatt	atAGCTGGAAtaAACTTt	aaattact
P. Abe	cctgcatt	atAGCTGGAAtaAACTTt	aaattact
C. Jac	cctgcatt	atAGCTGGAAtaAACTTt	aaattact
M. Mus	cctgcatt	atAGCTGGAAtaAACTTt	aaattact
R. Nor	cctgcatt	atAGCTGGAAtaAACTTt	aaattact
C. Por	cctgcatt	atAGCTGGAAtaAACTTt	aaattact
O. Cun	cctgcatt	atAGCTGGAAtaAACTTt	aaattact
C. Fam	cctgcatt	atAGCTGGAAtaAACTTt	aaattact
B. Tau	cctgcatt	atAGCTGGAAtaAACTTt	aaattact
E. Cab	cctgcatt	atAGCTGGAAtaAACTTt	aaattact
S. Sus	cctgcatt	atAGCTGGAAtaAACTTt	aaattact
L. Afr	cctgcatt	atAGCTGGAAtaAACTTt	aaattact
*****	*****	*****	*****

id=398736 gene=ENSG00000109332 name=UBE2D3 segment=chr4_103718524.103718541_-1 type=EM

H. Sap	gaa	gactt	AAGTTcTTCCAG	CTttggac
R. Mac	gaa	gactt	AAGTTcTTCCAG	CTttggac
P. Abe	gaa	gactt	AAGTTcTTCCAG	CTttggac
C. Jac	gaa	gactt	AAGTTcTTCCAG	CTttggac
M. Mus	gaa	gactt	AAGTTcTTCCAG	CTttggac
R. Nor	gaa	gacct	AAGTTcTTCCAG	CTttggac
C. Por	gaa	gactt	AAGTTcTTCCAG	CTttggac
O. Cun	gaa	gactt	AAGTTcTTCCAG	CTttggac
C. Fam	gaa	gactt	AAGTTcTTCCAG	CTttggac
B. Tau	gaa	gactt	AAGTTcTTCCAG	CTttggac
E. Cab	gaa	gactt	AAGTTcTTCCAG	CTttggac
S. Sus	gaa	gactt	AAGTTcTTCCAG	CTttggac
L. Afr	gaa	gactt	AAGTTcTTCCAG	CTttggac
***	***	*	*****	*****

id=398743 gene=ENSG00000109332 name=UBE2D3 segment=chr4_103718392.103718403_-1 type=EN VIEW

Figure 504:



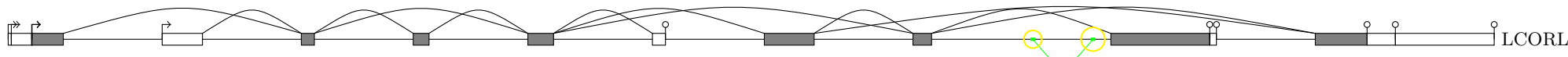
H. Sap	taaa	gTCA	GaATAA	ccTGCA	tt	atagctgg
R. Mac	taaa	gTCA	GaATAA	ccTGCA	tt	atagctgg
P. Abe	taaa	gTCA	GaATAA	ccTGCA	tt	atagctgg
C. Jac	taaa	gTCA	GaATAA	ccTGCA	tt	atagctgg
M. Mus	taca	gTCA	GaATAA	ccTGCA	tt	atagctgg
R. Nor	taaa	gTCA	GaATAA	ccTGCA	tt	atagctgg
C. Por	taaa	aTCA	GaATAA	ccTGCA	tt	atagctgg
O. Cun	taaa	gTCA	GaATAA	ccTGCA	tt	atagctgg
C. Fam	taaa	gTCA	GaATAA	ccTGCA	tt	atagctgg
B. Tau	taaa	gTCA	GaATAA	ccTGCA	tt	atagctgg
E. Cab	taaa	gTCA	GaATAA	ccTGCA	tt	atagctgg
S. Sus	taaa	gTCA	GaATAA	ccTGCA	tt	atagctgg
L. Afr	taaa	gTCA	GaATAA	ccTGCA	tt	atagctgg
** *	***	*****	*****	*****	*****	*****

id=398735 gene=ENSG00000109332 name=UBE2D3 segment=chr4_103718542_103718555_-1 type=EN

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R. Mac	ccTGCATT	ATagCTGG	aat	aaacttt	aaattact
P. Abe	ccTGCATT	ATagCTGG	aat	aaacttt	aaattact
C. Jac	ccTGCATT	ATagCTGG	aat	aaacttt	aaattact
M. Mus	ccTGCATT	ATagCTGG	aat	aaacttt	aaattact
R. Nor	ccTGCATT	ATagCTGG	aat	aaacttt	aaattact
C. Por	ccTGCATT	ATagCTGG	aat	aaacttt	aaattact
O. Cun	ccTGCATT	ATagCTGG	aat	aaacttt	aaattact
C. Fam	ccTGCATT	ATagCTGG	aat	aaacttt	aaattact
B. Tau	ccTGCATT	ATagCTGG	aat	aaacttt	aaattact
E. Cab	ccTGCATT	ATagCTGG	aat	aaacttt	aaattact
S. Sus	ccTGCATT	ATagCTGG	aat	aaacttt	aaattact
L. Afr	ccTGCATT	ATagCTGG	aat	aaacttt	aaattact
*****	*****	*****	*****	*****	*****

id=398736 gene=ENSG00000109332 name=UBE2D3 segment=chr4_103718524_103718541_-1 type=EN VIEW

Figure 505:



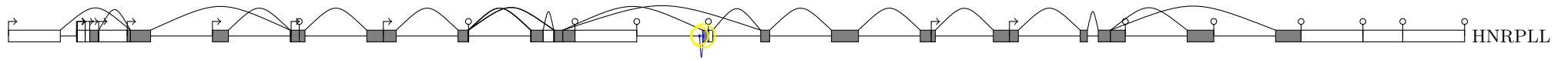
H. Sap	gtggctgg	gtaagcaatc...	868...	ttaaagggttgactcttt	TATTaCTTGTTTAgc	GGTAACGTCACGTTTGT	actaacaaaaactcctttag...	351...	ccatccatccag	gagactac
R. Mac	gtggctgg	gtaagcaatc...	881...	ttaaagggttgactcttt	TATTaCTTGTTTAgc	GGTAACGTCACGTTTGT	actaacaaaaactcctttag...	351...	ccatccatccag	gagactac
P. Tro	gtggctgg	gtaagcaatc...	871...	ttaaagggttgactcttt	TATTaCTTGTTTAgc	GGTAACGTCACGTTTGT	actaacaaaaactcctttag...	351...	ccatccatccag	gagactac
P. Abe	gtggctgg	gtaagcaatc...	881...	ttaaagggttgactcttt	TATTaCTTGTTTAgc	GGTAACGTCACGTTTGT	actaacaaaaactcctttag...	345...	ccatccatccag	gagactac
C. Jac	gtggctgg	gtaagcaatc...	876...	ttaaagggttgactcttt	TATTaCTTGTTTAgc	GGTAACGTCACGTTTGT	actaacaaaaactcctttag...	351...	ccatccatccag	gagactcc
M. Mus	gtggctgg	gtaagcaatc...	802...	ttaaagggttgactcttt	TATTaCTTGTTTAgc	GGTAACGTCAC	atttactaacaaaaactc-----	353...	ccatccatccag	gagactac
R. Nor	gtggctgg	gtaagcagaatg...	803...	ttaaagggttgactcttt	TATTaCTTGTTTAgc	GGTAACGTCACGTTT	ctactaacaaaaactccttt--	348...	ccatccatccag	gagactac
C. Por	atggctgg	gtaagcaatc...	846...	ttaaagggttgactcttt	TATTaCTTGTTTAgc	GGTAACGTCACGTTT	ctactaacaaaaactccttt--	354...	ccatccatccag	gagactac
O. Cun	atggctgg	gtaagcaatc...	877...	ttaaagggttgactcttt	TATTaCTTGTTTAgc	GGTAACGTCACGTTT	ctactaacaaaaactccttt--	354...	ccatccatccag	gagactac
C. Fam	atggctgg	gtaagcaatc...	883...	ttaaagggttgactcttt	TATTaCTTGTTTAgc	GGTAACGTCACGTTT	ctactaacaaaaactccttt--	354...	ccatccatccag	gagactac
B. Tau	gtggctgg	gtaagcaatc...	846...	ttaaagggttgactcttt	TATTaCTTGTTTAgc	GGTAACGTCAC	gtttctactaacaaaaactc-----	340...	ccatccatccag	gagactac
E. Cab	gtggctgg	gtaagcaatc...	885...	ttaaagggttgactcttt	TATTaCTTGTTTAgc	GGTAACGTCACGTTT	ctactaacaaaaactccttt--	353...	ccatccatccag	gagactac
S. Sus	atggctgg	gtaagcaatc...	879...	ttaaagggttgactcttt	TATTaCTTGTTTAgc	GGTAACGTCACGTTT	ctactaacaaaaactccttt--	349...	ccatccatccag	gagactac
L. Afr	atggctgg	gtaagcaatc...	876...	ttaaagggttgactcttt	TATTaCTTGTTTAgc	GGTAACGTCACGTTT	ctactaacaaagtccttt--	353...	ccatccatccag	gagactgc
	*****	***** **		*****	*****	*****	*****		*****	***** *

id=729994 gene=ENSG0000178177 name=LCORL segment=chr4_17886376_17887690_-1 type=IN

H. Sap	gtggctgg	gtaagcaatc...	1166...	ctcacagactt-aaaagtgtc	ATAAGCaGTGATGTTACCTAAGCAAGgAGTA	ataataaaggagtggaccctc...	54...	ccatccatccag	gagactac	
R. Mac	gtggctgg	gtaagcaatc...	1179...	ctcacagactt-aaaagtgtc	ATAAGCaGTGATGTTACCTAAGCAAGgAGTA	ataataaaggagtggaccctc...	54...	ccatccatccag	gagactac	
P. Tro	gtggctgg	gtaagcaatc...	1169...	ctcacagactt-aaaagtgtc	ATAAGCaGTGATGTTACCTAAGCAAGgAGTA	ataataaaggagtggaccctc...	54...	ccatccatccag	gagactac	
P. Abe	gtggctgg	gtaagcaatc...	1173...	ctcacagactt-aaaagtgtc	ATAAGCaGTGATGTTACCTAAGCAAGgAGTA	ataataaaggagtggaccctc...	54...	ccatccatccag	gagactac	
C. Jac	gtggctgg	gtaagcaatc...	1174...	ctcacagcctt-aaaagtgtc	ATAAGCaGTGATGTTACCTAAGCAAGgAGTA	ataataaaggagtggaccctc...	54...	ccatccatccag	gagactcc	
M. Mus	gtggctgg	gtaagcaatc...	1103...	-----aacct--aaagtgcaatgagca	GTGATGTTACCTAAGCAAGcAGTA	ataataaaggagtggaccctc...	54...	ccatccatccag	gagactac	
R. Nor	gtggctgg	gtaagcagaatg...	1100...	-----tcacagcctt--aaggtgcagt	GAGCaGTGATGTTACCTAAGCAAGgAGTG	ataataaaggagtggaccctc...	52...	ccatccatccag	gagactac	
C. Por	atggctgg	gtaagcaatc...	1147...	-----cacagactt-aaaagtgtcat	AAGCaGTGATGTTACCTAAGCAAGgAGTA	ataataaaggagtggaccctc...	54...	ccatccatccag	gagactac	
O. Cun	atggctgg	gtaagcaatc...	1178...	-----cacagactt-aaaagtgtcat	AAGCaGTGATGTTACCTAAGCAAGgAGTA	ataataaaggagtggaccctc...	54...	ccatccatccag	gagactac	
C. Fam	atggctgg	gtaagcaatc...	1184...	-----acagacttaaaagagtc	AAGCaGTGATGTTACCTAAGCAAGgAGTA	ataataaaggagtggaccctc...	54...	ccatccatccag	gagactac	
B. Tau	gtggctgg	gtaagcaatc...	1134...	acgtctcacagactt-aaaaa-----	GTGATGTTACCTAAGCAAGgAGTA	ataataaaggagtggaccctc...	54...	ccatccatccag	gagactac	
E. Cab	gtggctgg	gtaagcaatc...	1185...	-----cacagactt-aaaagagtc	AAGCaGTGATGTTACCTAAGCAAGgAGTA	ataataaaggagtggaccctc...	54...	ccatccatccag	gagactac	
S. Sus	atggctgg	gtaagcaatc...	1175...	-----cacagactt-aaaagagtc	AAGCaGTGATGTTACCTAAGCAAGgAGTA	ataataaaggagtggaccctc...	54...	ccatccatccag	gagactac	
L. Afr	atggctgg	gtaagcaatc...	1176...	-----cacagactt-aaaagatcat	AAGCaGTGATGTTACCTAAGCAAGgAGTA	ataataaaggagtggaccctc...	54...	ccatccatccag	gagactgc	
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Figure 506:



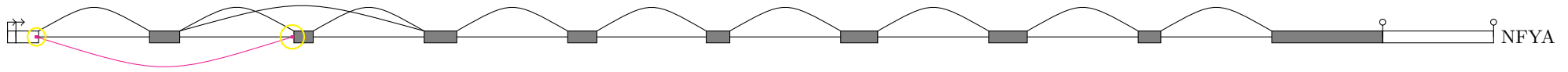
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B.Tau	aatagata	catacttgctgc...2871...at	atgtgtatatacatataa	AATA	TCTGTG	TTACTgattgtgaa	accatgtaatacag	gttg	ttgt
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O.Avi	aatagata	catacttgctgc...2876...at	atgtgtatatacatataa	AATA	TCTGTG	TTACTgattgtgaa	accatgtaatacag	gttg	ttgt
L.Afr	gagcggtg	cacacttgctgc...3058...at	atgtgtatatacatataa	AATA	TCTGTG	TTACTgattgtgaa	accatgtaatacag	gttg	ttgt
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P.Tro	gaaaggtg	cacacttgctgc...3033...ttt	actgattgtgaaaccat	GTAATACAG	GtTGTTgt
P.Abe	gaaaggtg	cacacttgctgc...3018...ttt	actgattgtgaaaccat	GTAATACAG	GtTGTTgt
C.Jac	gaaaggtg	cacacttgctgc...2831...ttt	actgattgtgaaaccat	GTAATACAG	GtTGTTgt
R.Nor	aaaaaata	cacatttgctgc...2585...ttt	actgattgtgaaaccat	GTAATACAG	GtTGTTgt
C.Por	aaaaaatg	cgtatttgctgc...2819...ttt	actgattgtgaaaccat	GTAATACAG	GtTGTTgt
O.Cun	gaaaggtg	cattcttgctgg...3274...ttt	actgattgtgaaaccat	GTAATACAG	GtTGTTgt
C.Fam	gaaaggtg	cacacttgctgc...3094...ttt	actgattgtgaaaccat	GTAATACAG	GtTGTTgt
F.Cat	aaggtgca	cacacctgctgc...4034...ttt	actgattgtgaaaccat	GTAATACAG	GtTGTTgt
B.Tau	aatagata	catacttgctgc...2902...ttt	actgattgtgaaaccat	GTAATACAG	GtTGTTgt
E.Cab	gaaaggtg	cacacttgctgc...3357...ttt	actgattgtgaaaccat	GTAATACAG	GtTGTTgt
O.Avi	aatagata	catacttgctgc...2907...ttt	actgattgtgaaaccat	GTAATACAG	GtTGTTgt
L.Afr	gagcggtg	cacacttgctgc...3089...ttt	actgattgtgaaaccat	GTAATACAG	GtTGTTgt
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Figure 507: CS=8.4



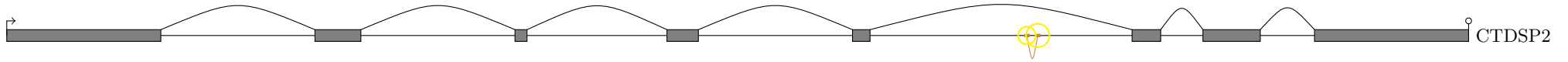
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P. Tro	ctaggcag	cggcagtg	ggcgg...	42...	gtactggagccaatcagcgc	GGGCAGc	GAACc-	GGGGAGCGAGG	cacg	gtgagtgt
P. Abe	ctaggcag	cggcagtg	ggcgg...	42...	gtactggagccaatcagcgc	GGGCAGc	GAACc-	GGGGAGCGAGG	cacg	gtgagtgt
C. Jac	cgaggcag	cggcagtg	ggcgg...	42...	gtactggagccaatcagcgc	GGGCAGc	GAACc-	GGGGAGCGAGG	cacg	gtgagtgt
C. Por	cgaggcag	cggcagtg	ggcgg...	42...	gtactggagccaatcagcgc	GGGCAGc	GAACc-	GGGGAGCGAGG	cacg	gtgagtgt
O. Cun	ccaggcag	cggctgtg	ggcgg...	42...	gtactggagccaatcagcgc	GGGCAGc	GAACc-	GGGGAGCGAGG	gaggcacg	gtgagtgt
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B. Tau	cgaggcag	cggcagtg	ggcgg...	42...	gtactggagccaatcagcgc	GGGCAGc	GAACc-	GGGGAGCGAGG	cacg	gtgagtgt
E. Cab	cgaggcag	cggcagtg	ggcgg...	42...	gtactggagccaatcagcgc	GGGCAGc	GAACc-	GGGGAGCGAGG	cacg	gtgagtgt
S. Sus	cgaggcag	cggcagtg	ggcgg...	42...	gtactggagccaatcagcgc	GGGCAGc	GAACc-	GGGGAGCGAGG	cacg	gtgagtgt
O. Avi	cgaggcag	cggnnnnnnn	nnnnn...	42...	ntactggagccaatcagcgc	GGGCAGc	GAACc-	GGGGAGCGAGG	cacg	gtgagtgt
L. Afr	cgaggcag	cggcagtg	ggcgg...	42...	gtactggagccaatcagcgc	GGGCAGc	GAACc-	GGGGAGCGAGG	cacg	gtgagtgt
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R. Mac	agcagcaggtatggaagtaa...	1592...	-cacatttccttctctgacata	TTTCaa	GCTCt	TCCTGTTCTGTTTC	tcag	cagcag	gg
P. Tro	agcagcaggtatggaagcaa...	1583...	-cacatttccttctctgacata	TTTCaa	GCTCt	TCCTGTTCTGTTTC	tcag	cagcag	gg
P. Abe	agcagcaggtatggaagcaa...	1585...	-cacatttccttctctgacata	TTTCaa	GCTCt	TCCTGTTCTGTTTC	tcag	cagcag	gg
C. Jac	agcagcaggtatggaagtaa...	1596...	-cacatttccttctctgacata	TTTCaa	GCTCt	TCCTGTTCTGTTTC	tcag	cagcag	gg
C. Por	agcagcaggtacggaagcag...	1400...	atatattttcttctctgacac	GTTTCaa	GCTCt	TCCTGTTCTGTTTC	tcag	cagcag	gg
O. Cun	agcagcaggtatggaagtaa...	1370...	-----tcttctctgacacattccaa	GCTCt	TCCTGTTCTGTTTC	tcag	cagcag	gg	
C. Fam	agcagcaggtatggaagtaa...	1756...	-tacatttccttctctgataca	TTTCaa	GCTCt	TCCTGTTCTGTTTC	tcag	cagcag	gg
B. Tau	agcagcaggtatggaagtaa...	1528...	-tacatttccttctctgacaca	TTTCaa	GCTCt	TCCTGTTCTGTTTC	tcag	cagcag	gg
E. Cab	agcagcaggtatgatttcag...	1505...	-tacatttccttctctgacaca	TTTCaa	GCTCt	TCCTGTTCTGTTTC	tcag	cagcag	gg
S. Sus	aacagcaggtatggaagaaa...	1494...	-tacatttccttctctgacaca	TTTCaa	GCTCt	TCCTGTTCTGTTTC	tcag	cagcag	gg
O. Avi	agcagcaggtatggaaggaa...	1527...	-tacatttccttctctgacaca	TTTCaa	GCTCt	TCCTGTTCTGTTTC	tcag	cagcag	gg
L. Afr	agcagcaggtagcaagtga...	1525...	-tacatttccttctctgacaca	TCTCaa	GCTCt	TCCTGTTCTGTTTC	tcag	cagcag	gg
	* **	*****	*	*****	*	*****	*****	*****	**

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Figure 508: CS=9.1



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P.Tro ctcaccag gtgagctgccag...1623...----ggacagaaagctcccatagaGGCTGTggCTGGAttCAAGTAATcCAGGATAGGCTgtttccatctgtgaggccta-----...307...gctcttcctcag gtgtatgt
P.Abe ctcaccag gtaagctgccag...1622...----gacagaaagctcccatagaGGCTGTggCTGGAttCAAGTAATcCAGGATAGGCTgtttccatctgtgaggccta-----...311...gctcttcctcag gtgtatgt
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C.Por ctcaccag gtgagcttctctg...1636...----ggacacaatgctcccacagaGGCTGTggCTGGAttCAAGTAATcCAGGATAGGCTgtttccatctgtgaggccta-----...279...gcttttctcag gtgtacgt
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B.Tau ctcaccag gtaagtacttcc...1719...accaaggataggaactcctGCCGagGGCTGTggCTGGAttCAAGTAATcCAGGATAGGCTgtttccatctgtgaggccta-----...305...gcttccctcag gtgtacgt
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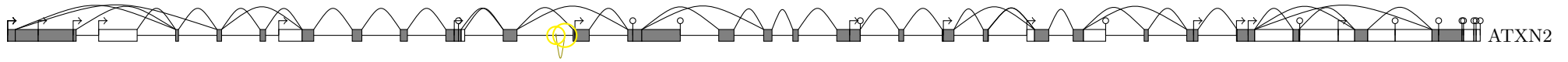
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Figure 509: CS=15.6



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P. Tro	taatggag	gcaagtattttg...1596...	atagtggtatagatcctaa	TTAACCCCTTTGGGA	acgtgtattcatttaacag...192...	ttggtctgtcag	gtgttccc
P. Abe	taatggag	gcaagtattttg...1614...	gtagtggtatagatcctaa	TTAACCCCTTTGGGA	acgtgtattcatttaacag...192...	ttggtctgtcag	gtgttccc
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L. Afr	taatggag	gcaagtattttg...1574...	gtagtggtatagatcctaa	TTAACCCCTTTGGGA	acgtgtactcatttaacag...193...	ttggtctgtcag	gtgttccc
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Figure 510:



AC012123.1

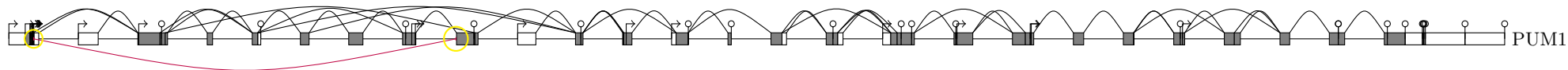
H. Sap	tccaccag	gtacttgttggc...644...	cctcctccaacctggcagac	AGGGGtGGGGGAtGGGAGGGAGGGGAGcAGGG	-----	tggtggagcgggtggggtgt	...246...	ggctgttggcag	caacagca
R. Mac	tccaccag	gtacttgttggc...647...	cctcctccaacctggcagac	AGGGGtGGGGGAtGGGAGGGAGGGGAG	-----	cagggtggtggatggggtgg	...242...	agctgttggcag	caacagca
P. Tro	tccaccag	gtacttgttggc...644...	cctcctccaacctggcagac	AGGGGtGGGGGAtGGGAGGGAGGGGAGcAGGG	-----	tggtggagggggtggggtgt	...242...	ggctgttggcag	caacagca
P. Abe	tccaccag	gtacttgttggc...647...	cctcctccaacctggcagac	GGGGtGGGGGAtGGGAGGGAGGGGAGcAGGG	-----	tggtggagggggtggggtgt	...242...	ggctgttggcag	caacagcg
C. Jac	tccacaag	gtacttgttggc...653...	cctcctccaacctggcagac	AGGGGtGGGGGAtGGGAGGGAGGGGAGcAGGG	tgTGGAgGGGGTG	gggtgtggtcggggtgggtg	...410...	ggctcttggcag	caacagta
M. Mus	tccaccag	gtacttgttggc...723...	-----	gtcggggtgggaagggtgt	GGAGGGAGAGAGG	-----	aacaacaatcaaggccccgc	...167...	ctctcttggcag
R. Nor	tccaccag	gtacttgttggc...650...	cctcctccaacctggcagac	AGGGGtGGGGGAtGGGAGGGGAGcAGGGAGG	-----	tnaaggggggtggggtgtgg	...220...	ctctcttggcag	cgacggcg
C. Por	tccaccag	gtacttgttggc...647...	cctcctccaacctggcagac	AGGGctGGGGGAtGGGA	-aGGGGAGcGAGG	-----	tggcggagggtggggtgtg	...188...	ggcttctggcag
O. Cun	tccaccag	gtacttgttggc...650...	cctcctccaacctggcagac	AGGGGtGGGGGAtGGGAGGGAGGGGAGcGGGG	-----	tggtggagggggtggggtgt	...243...	ggctcgggagcag	cgagagcg
C. Fam	tccaccag	gtacttgttggc...647...	cctcctccaacctggcagac	AGGGGtGGGGGAtGGGAGGGAGGGGAGcAGGG	-----	tagtggaggtggggtgt	...242...	ggctcttggcag	cgacagtg
B. Tau	tccaccag	gtacttgttggc...638...	cgccctcgacctggcagac	AGGGGtGGGGGAtGGGAGGGAGGtGAGC	-----	agggtggtggagg	---ggggtgg	...247...	ggctctcggcgg
S. Sus	tccaccag	gtacttgttggc...650...	cctcctcgacctggcagac	AGGGGtGGGGGAtGGGAGGGAGGGGAaAGGG	-----	tagtggagggggtggggtgt	...227...	ggctcttggcag	cgacagcg
L. Afr	tccaccag	gtacttgttggc...640...	cctcctccaacctggcagac	AGGGGtGGGGGAtGGGAGGGAGGGAGAGGG	-----	tggtggagggggtggggtgt	...238...	ggctcttggcag	cgacagcg

id=479905 gene=ENSG00000228835 name=AC012123.1 segment=chr18.30349931.30350916.1 type=IN

H. Sap	cgttcag	gtggaccctacc...896...	-----	aaagcgag-ccccccctcct	-----	CCCTCTCCctCTCTCTCCCTCTCTC	-tTCTCT	-----	ctctctataaagaacctca	...36...	ctgccttcacag	gctggcga	
R. Mac	cgttcag	gtggaccctacc...902...	-----	ggggaaaaagcgag-cccccc	-----	CTCCCTCCctCTCCctCTCTCTC	-tTCTCT	-----	ctctataaagaacctcaag	...34...	ctgccttcacag	gctggcga	
P. Tro	cgttcag	gtggaccctacc...907...	-----	aaaagcgag-ccccccctcct	-----	CCCTCTCCctCTCTCTCCCTCTCTC	-tTCTCT	-----	ctctctataaagaacctcaa	...181...	ctgccttcacag	gctggcga	
P. Abe	cgttcag	gtggaccctacc...899...	-----	aaagcgag-ccccccctcct	-----	CCCTCTCCctCTCTCTCCCTCTCTC	-tTCTC	-----	tctctataaagaacctca	...37...	ctgccttcacag	gctggcga	
C. Jac	tgttcag	gtggaccctacc...1570...	-----	ctccccctcacgttctgga	TGCCCCagTCCGTCCCTCTCCctCTCTCTCCCTCTCTC	-tTCTCT	-----	ctctctataaagaacctca	...36...	ctgccttcacag	gctggcga		
M. Mus	tgttcag	gtggaccctaac...873...	-----	ggaaaaagcgag-ccccccctc	-----	CCTCccTCTCCctCTCT	-----	ctccctctctct	---tctcttct	...54...	ctgccttcacag	gctggcga	
R. Nor	tgttcag	gtggaccctaac...873...	-----	gaaaaagcgag-ccccccctc	-----	CCTCCCTCTCCctCTCTCTCCCTCTCTC	-----	tctcttctctataaagaa	-----	...42...	ctgccttcacag	gctggcga	
C. Por	cgttcag	gtggaccctaac...973...	-----	gaaaaagcgag-ccccccctc	-----	CCTCctCTCTCCctCTCTC	TCCCTCTCTT	-----	ctcttctctataaagaac	-----	...41...	ctgccttcacag	gctggcga
O. Cun	catttcag	gtggaccctcac...909...	-----	aaagcgagcccccccttct	-----	CCCTCTCCctCTCTCTCCCTCTCTT	-tTCTCT	-----	ctctataaagaacctcaag	...34...	ctgccttcacag	gctggcga	
C. Fam	cgttcag	gtggaccctaac...919...	-----	aaagcgag-ccccccctcct	-----	CCCTCTCCctCTCTCTCCCTCTCTC	-tTCTCT	-----	ctctctataaagaacctca	...36...	ctgccttcacag	gctggcga	
B. Tau	cgttcag	gtggaccctaac...947...	-----	gcgag-ccccccctcctccg	-----	GCTCCCTCTCTCTCCctCTCTCTT	-tTCTCT	-----	ctctataaagaacctcaag	...34...	ctgccttcacag	gctggcga	
S. Sus	catttcag	gtggaccctaac...892...	-----	aaggggaaaaagcgag-cccc	-----	CCCTccCTCCctCTCTCTCTCCCTCTCTT	-tctctctctataaagaac	-----	...41...	ctgccttcacag	gctggcga		
L. Afr	cgttcag	gtggaccctagc...910...	-----	aaagcgag-ccccccctcct	-----	CCCTCTCCctCTCTCTCCCTCTCTC	-tTCTCT	-----	ctctataaagaacctca	...36...	ctgccttcacag	gctggcga	

id=479909 gene=ENSG00000228835 name=AC012123.1 segment=chr18.30352251.30353277.1 type=IN VIEW

Figure 512:



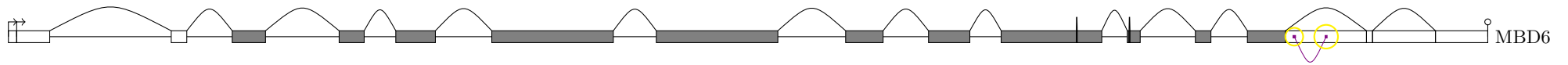
H. Sap	a gt	GAAGGTAAG	GGGgagc
R. Mac	a gt	GAAGGTAAG	GGGgagc
P. Tro	a gt	GAAGGTAAG	GGGgagc
P. Abe	a gt	GAAGGTAAG	GGGgagc
C. Jac	a gt	GAAGGTAAG	GGGgagc
M. Mus	a gt	GAAGGTAAG	GGGgagc
R. Nor	a gt	GAAGGTAAG	GGGgagc
C. Por	a gt	GAAGGTAAG	GGGgagc
O. Cun	a gt	GAAGGTAAG	GGGgagc
C. Fam	a gt	GAAGGTAAG	GGGgagc
B. Tau	a gt	GAAGGTAAG	GGGgagc
E. Cab	a gt	GAAGGTAAG	GGGgagc
S. Sus	a gt	GAAGGTAAG	GGGgagc
L. Afr	a gt	GAAGGTAAG	GGGgagc
* **		*****	*****

id=820292 gene=ENSG00000134644 name=PUM1 segment=chr1.31538532.31538535_-1 type=AN

H. Sap	ga	t t t t t a g	g t t t g t a t g t t t . . . 2340 . . . a c t g a a a a t a a g g t t t a a t g -	CCCTTACTTTC	t c t g t t t a g	c c g t a c c c
R. Mac	ga	t t t t a g	g t t t g t a t g t t t . . . 2379 . . . a c t g a a a a t a a g g t t t a a t g -	CCCTTACTTTC	t c t g t t t a g	c c g t a c c c
P. Tro	ga	t t t t a g	g t t t g t a t g t t t . . . 2340 . . . a c t g a a a a t a a g g t t t a a t g -	CCCTTACTTTC	t c t g t t t a g	c c g t a c c c
P. Abe	ga	t t t t a g	g t t t g t a t g t t t . . . 2337 . . . a c t g a a a a t a a g g t t t a a t g -	CCCTTACTTTC	t c t g t t t a g	c c g t a c c c
C. Jac	ga	t t t t a g	g t t t g t a t g t t t . . . 2358 . . . g c t g a a a a t a a g g t t t a a t g -	CCCTTACTTTC	t g t t t a g	c c g t a c c c
M. Mus	ga	t t t t a g	g t t t g t a t a t t t . . . 2060 . . . g a t c a a a t a a a g g t t t a a t g -	CCCTTACTTTC	t c t g t t t a g	c c g t a c c c
R. Nor	ga	t t t t a g	g t t t g t a t a t t t . . . 2144 . . . g a t c a a a a t a a g g t t t a a t g -	CCCTTACTTTC	t c t g t t t a g	c c g t a c c c
C. Por	ga	t t t t a g	g t t t g t a t g t t t . . . 2173 . . . a c t c a a a a t a a g g t t t a a t g -	CCCTTACTTTC	t c t g t t t a g	c c g t a c c c
O. Cun	ga	t t t t a g	g t t t g t a t g t t t . . . 1911 . . . g c t c a a a a t a a g g t t t a a t g -	CCCTTACTTTC	t c t g t t t a g	c c g t a c c c
C. Fam	ga	t t t t a g	g t t t g t a t g t t t . . . 2292 . . . g c t c a a a a t a a g g t t t a a t g -	CCCTTACTTTC	t c t g t t t a g	c c g t a c c c
B. Tau	ga	t t t t a g	g t t t g t a t g t t t . . . 1969 . . . a c t t a a a a t a a g g t t t a a t g -	CCCTTACTTTC	t c t g t t t a g	c c g t a c c c
E. Cab	ga	t t t t a g	g t t t g t a t g t t t . . . 1943 . . . g c t c a a a a t a a g a t t t a a t g -	CCCTTACTTTC	t c t g t t t a g	c c g t a c c c
S. Sus	ga	t t n t a g	g t t t g t a t g t t t . . . 1954 . . . a c t t a a a a t a a g g t t t a a t g -	CCCTTACTTTC	t c t g t t t a g	c c g t a c c c
L. Afr	ga	t t t t a g	g t t t g t a t g t t t . . . 1903 . . . a c t c a a a a t a a g g t t t a a t g -	CCCTTACTTTC	t c t g t t t a g	c c g t a c c c
** **	** **	*****	*****	*****	*****	*****

id=820318 gene=ENSG00000134644 name=PUM1 segment=chr1.31465508.31467900_-1 type=IN VIEW

Figure 513: CS=8.4



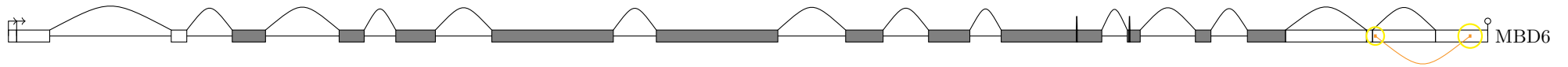
H. Sap	acctgcac	ctgtggacagtg	gggtgggggc	-----	::::	-----	ACTAcTCCCCaCTCAG	---	agcacaatgcaactccttc	...	264	..	agctactgttgg	ctgctgcc		
R. Mac	acctgcac	ctgtggacagtg	gggtgggggc	-----	::::	-----	ACTACTCCCCaCTCAG	---	agcacaatgcaactccttc	...	249	..	agctactgttgg	ctgctgcc		
P. Tro	acctgcac	ctgtggacagtg	gggtgggggc	-----	::::	-----	ACTAcTCCCCaCTCAG	---	agcacaatgcaactccttc	...	259	..	agctactgttgg	ctgctgcc		
P. Abe	acctgcac	ctgtggacagtg	gggtgggggc	-----	::::	-----	ACTAcTCCCCaCTCAG	---	agcacaatgcaactccttc	...	255	..	agctactgttgg	ctgctgcc		
C. Jac	acctgcac	ctgtggacagtg	gggtgggggc	-----	::::	-----	GCACTACTCCCCaCTCAG	---	agcacaatgcaacccttc	...	248	..	agctactgttgg	ctgctgcc		
R. Nor	acgtgcac	ctgtggacagtg	gggtgggggc	-----	::::	-----	ACTAatCCCCaCTCAG	---	agcacaatgcaacccttc	...	250	..	agctactgttgg	ctgctgcc		
C. Por	acttgac	ctgtggacagtg	gggtgggggc	-----	::::	-----	GTACTACTCCCCaCTCAG	---	agcacaatgcaacccttc	...	242	..	agctactgttgg	ctgctgcc		
D. Cun	acctgcac	ctgtggacagtg	gggtgggggc	-----	::::	-----	ACTACTCCCCaCTCAG	---	agcacaatgcaacccttc	...	254	..	agctactgttgg	ctgctgcc		
C. Fam	acctgcac	ctgtggacagtg	gggtgggggc	-----	::::	-----	ACTACTCCCCaCTCAG	---	agcacaatgcaacccttc	...	248	..	agctactgttgg	ctgctgcc		
F. Cat	acctgcac	ctgtggacagtg	gggtgggggc	-----	::::	-----	ACTACTCCCCaCTCAG	---	agcacaatgcaacccttc	...	246	..	agctactgttgg	ctgctgcc		
B. Tau	acctgcac	ctgtggacagtg	gggtgggggc	-----	::::	-----	ACTACTCCCCaCTCAG	---	agcacaatgcaacccttc	...	247	..	agctactgttgg	ctgctgcc		
E. Cab	acctgcac	ctgtggacagtg	gggtgggggc	-----	::::	-----	ACTACTCCCCaCTCAG	---	agcacaatgcaacccttc	...	246	..	agctactgttgg	ctgctgcc		
S. Sus	acctgcac	ctgtggacagtg	gggtgggggc	-----	::::	-----	ACTACTCCCCaCTCAG	---	agcacaatgcaacccttc	...	248	..	agctactgttgg	ctgctgcc		
O. Avi	acctgcac	ctgtggacagtg	gggtgggggc	cactactccca	::::	agggaaagctcacc	ccccctcccccccaagc	catgtcactg	AAAAAGGCCTGGGGGGGT	---	ggatatggccctctccca	...	136	..	agctactgttgg	ctgctgcc
L. Afr	acctgcac	ctgtggacagtg	gggtgggggc	cactactcctca	::::	agggaaagcttacc	ccccccgcccaagc	catgtcac	TGAAAAGCCTGGGGAGGGGT	---	ggatatggccctctccca	...	136	..	agctactgttgg	ctgctgcc
	** **	*****	*****						* * * *				*****	*****		

id=221004 gene=ENSG00000166987 name=MBD6 segment=chr12.57923100.57923432.1 type=A3

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R. Mac	acctgcac	ctgtggacagtg	...104...	--agccatgtcactgaaaaggc	-----	CTGGGGGGGATGGT	---	atgtggccctttccccacca	---	...135...	agctactgttgg	ctgctgcc
P. Tro	acctgcac	ctgtggacagtg	...115...	--agccatgtcactgaaaaggc	-----	CT-GGGGGGATGGT	---	atatggccctttccccacca	---	...135...	agctactgttgg	ctgctgcc
P. Abe	acctgcac	ctgtggacagtg	...111...	--agccatgtcactgaaaaggc	-----	CT-GGGGGGATGGT	---	atatggccctttccccacca	---	...135...	agctactgttgg	ctgctgcc
C. Jac	acctgcac	ctgtggacagtg	...105...	--agccatgtcactgaaaaggc	-----	CT-GGGGGGTGGT	---	atggccctctccccaccagg	---	...133...	agctactgttgg	ctgctgcc
R. Nor	acgtgcac	ctgtggacagtg	...106...	--agccatgtcactgaaaggc	-----	CT-GGGGGGTGGT	---	atatggccctctccccacca	---	...136...	agctactgttgg	ctgctgcc
C. Por	acttgac	ctgtggacagtg	...106...	--gcatgtcactgaaaaggc	-----	TT-GGGGGGTGGT	---	gtggc-ctctccccaccagg	---	...126...	agctactgttgg	ctgctgcc
D. Cun	acctgcac	ctgtggacagtg	...105...	--agccatgtcactgaaaaggc	-----	CT-GGGGGGTGGT	---	atatggccctctccccacca	---	...140...	agctactgttgg	ctgctgcc
C. Fam	acctgcac	ctgtggacagtg	...105...	--agccatgtcactgaaaaggc	-----	CTGGGGGGGATGGT	---	atatggccctctccccacca	---	...133...	agctactgttgg	ctgctgcc
F. Cat	acctgcac	ctgtggacagtg	...105...	--agccatgtcactgaaaaggc	-----	CT-GGGGGGTGGT	---	atatggccctctccccacca	---	...133...	agctactgttgg	ctgctgcc
B. Tau	acctgcac	ctgtggacagtg	...105...	--agccatgtcactgaaaaggc	-----	CT-GGGGGGTGGT	---	atatggccctctccccacca	---	...133...	agctactgttgg	ctgctgcc
E. Cab	acctgcac	ctgtggacagtg	...105...	--agccatgtcactgaaaaggc	-----	CT-GGGGGGTGGT	---	atatggccctctccccacca	---	...133...	agctactgttgg	ctgctgcc
S. Sus	acctgcac	ctgtggacagtg	...106...	--agccatgtcactgaaaaggc	-----	CT-GGGGGGTGGT	---	atatggccctctccccacca	---	...134...	agctactgttgg	ctgctgcc
O. Avi	acctgcac	ctgtggacagtg	...153...	cccacca-g--gctaaggggaaa	ACCCCTCCCC	CAGTCTTTT	atttgttaagttattttt	g	---	...79...	agctactgttgg	ctgctgcc
L. Afr	acctgcac	ctgtggacagtg	...154...	-ctacca-ggcgctaaggggaa	CACCCCT	CCCCAGTCTTTA	TTT	ttaagttatttttcacaa	---	...74...	agctactgttgg	ctgctgcc
	** **	*****	*	*** * ** *		** * *		* * *		*****	*****	

id=221004 gene=ENSG00000166987 name=MBD6 segment=chr12.57923100.57923432.1 type=A3 VIEW

Figure 514:



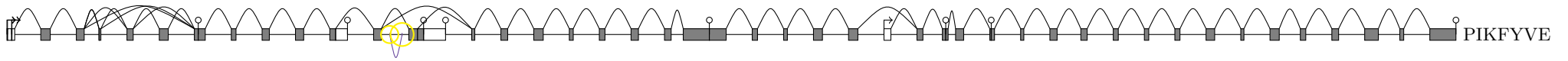
H. Sap	agtgaaAG	GTACAAAGCA	ataagcatcatgcatcctcc...217...caaaacgctcag	agacgttg
R. Mac	agtgaaAG	GTACAAAGCA	ataagcatcatgcatcctcc...218...caaaacgctcag	agacgttg
P. Tro	agtgaaAG	GTACAAAGCA	ataagcatcatgcatcctcc...218...caaaacgctcag	agacgttg
P. Abe	agtgaaAG	GTACAAAGCA	ataagcatcatgcatcctcc...217...caaaacgctcag	agacgttg
C. Jac	agtgaaAG	GTACAAAGCA	ataagcatcatgcatcctcc...216...caaaacgctcag	agacgttg
C. Por	agtgaaAG	GTACAAAGCA	ataagcatcatgcatcctcc...212...caaaatgctcag	agacgttg
O. Cun	agtgaaAG	GTACAAAGCA	ataagcatcacacctcctcc...215...caaaacgctcag	agacgttg
C. Fam	agtgaaAG	GTACAAAGCA	ataagcatcatgattcccc...215...cgaaacgctcag	agacgttg
F. Cat	agtgaaAG	GTACAAAGCA	ataagcatcatgattcccc...216...cgaaacgctcag	agacgttg
B. Tau	aatgaaAG	GTACAAAGCA	ataagcatcatgcgtcctcc...217...caaaacgctcag	agacgttg
E. Cab	agtgaaAG	GTACAAAGCA	ataagcatcatgcatcctcc...214...caaaacgctcag	agacgttg
S. Sus	agtgaaAG	GTACAAAGCA	ataagcatcatgcatcctcc...216...caaaatgctcag	agacgttg
L. Afr	agtgaaAG	GTACAAAGCA	ataagcatcatgattcctcc...223...caaaacgctcag	agacgttg
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id=221006 gene=ENSG00000166987 name=MBD6 segment=chr12.57923458.57923716.1 type=A3

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R. Mac	acgctcag	agacgttgtgat...97...acccttgggagttttaattc	TGTTTTGTACTT	gcctgtggggcctccactg...42...tttgaactctg	gctctggc
P. Tro	acgctcag	agacgttgtgat...97...acccttgggagttttaattc	TGTTTTGTACTT	gcctgtggggcctccactg...42...tttgaactctg	gctctggc
P. Abe	acgctcag	agacgttgtgat...97...acccttgggagttttaattc	TGTTTTGTACTT	gcctgtggggcctccactg...42...tttgaactctg	gctctggc
C. Jac	acgctcag	agacgttgtgat...97...actcctgggagttttaattc	TGTTTTGTACTT	gcctgtggggcctcccctg...42...tttgaactctg	gctctggc
C. Por	atgctcag	agacgttgtgat...94...acccttgggagttttaattc	TGTTTTGTACTT	gccttcggggcctccactg...42...tttgaactccg	gctttggc
O. Cun	acgctcag	agacgttgtgat...97...acccttgggagttttaattc	TGTTTTGTACTT	gcctgtggggcctccactg...42...tttgaactctg	gctctggc
C. Fam	acgctcag	agacgttgtgat...97...accgttgggagttttaattc	TGTTTTGTACTT	gcctgtggggcctccactg...42...tttgaactctg	gctctggc
F. Cat	acgctcag	agacgttgtgat...97...acccttgggagttttaattc	TGTTTTGTACTT	gcctgtggggcctccactg...42...tttgaactctg	gctctgac
B. Tau	acgctcag	agacgttgtgac...97...acccttgggagttttaattc	TGTTTTGTACTT	gcctgtggggcctccactg...42...tttgaactctg	gctctgac
E. Cab	acgctcag	agacgttgtgat...97...acccttgggagttttaattc	TGTTTTGTACTT	gcctgtggggcctccactg...42...tttgaactctg	gctctgac
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L. Afr	acgctcag	agacgttgtgat...97...accctcgggagttttaattc	TGTTTTGTACTT	gcctgtggggcctccactg...42...tttgaattctg	gctctggc
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id=221007 gene=ENSG00000166987 name=MBD6 segment=chr12.57923717.57923931.1 type=E3 VIEW

Figure 515:



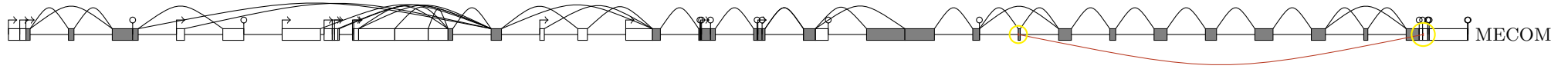
H.Sap	tttggcta	gtgagtttaact...114...	tgatagcagtcctttgtccta	GATACAGTATTTTC	tt---aaaccaacttgtaggtt---	335...	caactactaaaag	attctgcc
R.Mac	tttggcta	gtgagtttaact...114...	tgatagcagtcctttgtccta	GATACAGTATTTTC	tt---aaaccaacttgtaggtt---	335...	caactactaaaag	attctgcc
P.Tro	tttggcta	gtgagtttaact...114...	tgatagcagtcctttgtccta	GATACAGTATTTTC	tt---aaaccaacttgtaggtt---	335...	caactactaaaag	attctgcc
P.Abe	tttggcta	gtgagtttaact...114...	tgatagcagtcctttgtccta	GATACAGTATTTTC	tt---aaaccaacttgtaggtt---	335...	caactactaaaag	attctgcc
C.Jac	tttggcta	gtgagtttaatt...114...	tgacagcagtcctttgtccta	GATACAGTATTTTC	tt---aaaccaacttgtaggtt---	337...	caactactaaaag	attctgcc
M.Mus	tttggcta	gtaagtttggtt...95...	tgatagtgatcctttgtccta	GATACAGTATTTTC	tttaagaaccagttttagttag---	336...	caactactaaaag	attctgcc
R.Nor	tttggcta	gtaagtttgatt...95...	cgatagtgatcctttgtccta	GATACAGTATTTTC	tttaagaaccagttttagttag---	334...	caactactaaaag	attctgcc
C.Por	tttggcta	gtgagtttgatt...103...	tgatagcaatcctttgtccta	GATACAGTATTTTC	tttaagaaccagttttagttag---	335...	caactactaaaag	attctgcc
O.Cun	tttggcta	gtgagtttaact...112...	tgatagcaatcctttgtccta	GATACAGTATTTTC	tttaagaaccagttttagttag---	330...	caactactaaaag	attctgcc
C.Fam	tttgacga	gtgagtgtaaac...117...	cgatagcaatcctttgtccta	GATACAGTATTTTC	tttaagaaccagttttagttag---	332...	cgactactaaaag	actctgcc
F.Cat	tttgacta	gtgagtttaaac...120...	tgatagcaatcctttgtccta	GATACAGTATTTTC	tttaagaaccagttttagttag---	343...	caactactaaaag	attctgcc
B.Tau	tttgacta	gtgagtttcaact...119...	tgatagcaatcctttgtccta	GATACAGTATTTTC	tttaagaaccagttttagttag---	351...	caactactaaaag	actctgcc
E.Cab	tttgacta	gtgagtttagct...120...	tgatagcaatcctttgtccta	GATACAGTATTTTC	tttaagaaccagttttagttag---	334...	caactactaaaag	actctgcc
S.Sus	tttgacca	gtgagtttcaact...124...	tgatagcaatcctttgtccta	GATACAGTATTTTC	tttaagaaccagttttagttag---	344...	caactactaaaag	attctgcc
L.Afr	tttggcta	gtgagtttaaat...124...	tgatagcaatcctttgtccta	GATACAGTATTTTC	tttaagaaccagttttagttag---	346...	caactactaaaag	attctgcc
		**** * *	** *** *	* ** * ** *	*****	***	* * *****	* *****

id=768928 gene=ENSG00000115020 name=PIKFYVE segment=chr2.209169043_209169569_1 type=IN

H.Sap	tttggcta	gtgagtttaact...352...	----aagtctacac--agaag----	tacat	GAAAATACTGTATC	cattttggtagttgacattg...	97...	caactactaaaag	attctgcc
R.Mac	tttggcta	gtgagtttaact...352...	----aagtctacac--agaag----	tacat	GAAAATACTGTATC	cattttggtagttgacattg...	97...	caactactaaaag	attctgcc
P.Tro	tttggcta	gtgagtttaact...352...	----aagtctacac--agaag----	tacat	GAAAATACTGTATC	cattttggtagttgacattg...	97...	caactactaaaag	attctgcc
P.Abe	tttggcta	gtgagtttaact...352...	----aagtctacac--agaag----	tacat	GAAAATACTGTATC	cattttggtagttgacattg...	97...	caactactaaaag	attctgcc
C.Jac	tttggcta	gtgagtttaatt...354...	----aagtctacac--agaag----	tacat	GAAAATACTGTATC	cattttggtagttgacattg...	97...	caactactaaaag	attctgcc
M.Mus	tttggcta	gtaagtttggtt...339...	----aagtctacac--agaag----	tacat	GAAAATACTGTATC	cattttggtagttgacattg...	92...	caactactaaaag	attctgcc
R.Nor	tttggcta	gtaagtttgatt...338...	----aagtctacac--agaaa----	tacat	GAAAATACTGTATC	cattttggtagttgacattg...	91...	caactactaaaag	attctgcc
C.Por	tttggcta	gtgagtttgatt...340...	tttatatgtttacac--agaag----	TATGt	GAAAATACTGTATC	cattttggtagttgacattg...	98...	caactactaaaag	attctgcc
O.Cun	tttggcta	gtgagtttaact...345...	----aagtctacac--agaag----	tacat	GAAAATACTGTATC	cattttggtagttgacattg...	97...	caactactaaaag	attctgcc
C.Fam	tttgacga	gtgagtgtaaac...355...	----aagtctccac--agaag----	tacat	GAAAATACTGTATC	cattttggtagttgacattg...	94...	cgactactaaaag	actctgcc
F.Cat	tttgacta	gtgagtttaaac...366...	----aaggctacac--agaag----	tacgt	GAAAATACTGTATC	cattttggtagttgacattg...	97...	caactactaaaag	attctgcc
B.Tau	tttgacta	gtgagtttcaact...367...	-----acac--agaagtatcaatacac	GAAAATACTGTATC	cattttggtagttgacattg...	103...	caactactaaaag	actctgcc	
E.Cab	tttgacta	gtgagtttagct...357...	----aagtctacac--agaag----	tacat	GAAAATACTGTATC	cattttggtagttgacattg...	97...	caactactaaaag	attctgcc
S.Sus	tttgacca	gtgagtttcaact...370...	----aagtctacac--agaag----	tacat	GAAAATACTGTATC	cattttggtagttgacattg...	98...	caactactaaaag	attctgcc
L.Afr	tttggcta	gtgagtttaaat...373...	-----gtctacacatagaag----	tacat	GAAAATACTGTATC	cattttggtagttgacattg...	97...	caactactaaaag	attctgcc
		**** * *	** *** *	* ** ***	**	*****	* * *****	* *****	

id=768928 gene=ENSG00000115020 name=PIKFYVE segment=chr2.209169043_209169569_1 type=IN VIEW

Figure 516:



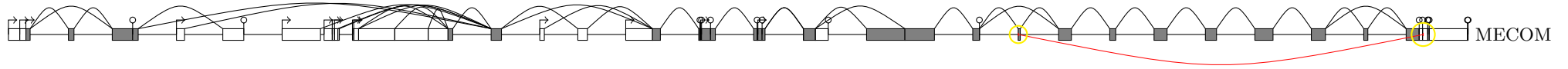
H.Sap	accaca	a	gtaagtattttg...4789...aatttttgttttgtttca	ATTTGCTC	cCAG	TTccaact
R.Mac	accaca	a	gtaagtatttcg...4486...aatttttgttttgtttca	ATTTGCTC	cCAG	TTccaact
P.Tro	accaca	a	gtaagtattttg...4929...aatttttgttttgtttca	ATTTGCTC	cCAG	TTccaact
P.Abe	accaca	a	gtaagtattttg...4830...aatttttgttttgtttca	ATTTGCTC	cCAG	TTccaact
C.Jac	accaca	a	gtaagtattttg...4493...aatttttgttttgtttca	ATTTGCTC	cCAG	TTccaact
C.Por	accaca	a	gtaagtattttg...4264...taatttttgttttgtttca	ATTTGCTC	cCAG	TTccaagt
O.Cun	accaca	a	gtgagtattttg...4845...attttttgttttgctca	ATTTGCTC	cCAG	TTccaact
C.Fam	accaca	a	gtaagtattttg...4944...aatttttgttttgtttca	ATTTGCTC	cCAG	TTccaact
B.Tau	accaca	a	gtaagtattttg...4944...attttttgttttgtttca	ATTTGCTC	cCAG	TTccaact
E.Cab	accaca	a	gtaagtaatttg...4944...aatttttgttttgtttca	ATTTGCTC	cCAG	TTccaact
S.Sus	accaca	a	gtaagtattttg...4944...aatttttgttttgtttca	ATTTGCTC	cCAG	TTccaact
O.Avi	accaca	a	gtaagtattttg...4944...attttttgttttgtttca	ATTTGCTC	cCAG	TTccaact
L.Afr	accaca	a	gtaagtattttg...4944...aatttttgttttgtttca	ATTTGCTC	cCAG	TTccaact
	*****	*	** **** * *	*****	*****	***** *

id=478370 gene=ENSG0000085276 name=MECOM segment=chr3.168825741.168830574_-1 type=IN

H.Sap	aGACTGct	GAGCAGAAT	gccttataaacctgcagggt...27...-actgaatgattt	aaaaaaga
R.Mac	aGACTGct	GAGCAGAAT	gccttataaacctgcagggt...27...-actgaatgattt	aaaaaaga
P.Tro	aGACTGct	GAGCAGAAT	gccttataaacctgcagggt...27...-actgaatgattt	aaaaaaga
P.Abe	aGACTGct	GAGCAGAAT	gccttataaacctacagggt...27...-actgaatgattt	aaaaaaga
C.Jac	aGACTGct	GAGCAGAAT	gccttataaacctgcagggt...27...-actgaatgattt	aaaaaaga
C.Por	aGACTGct	GAGCAGAAT	gccttataaacctgaaagggt...27...-actgaatgatta	aagaaaaa
O.Cun	aGACTGct	GAGCAGAAT	gccttataaacctgaagggt...27...-actgaatgatta	aaaaaata
C.Fam	aGACTGct	GAGCAGAAT	gccttagaacctgaagggt...27...-actgaatgctta	aaaaaaaa
B.Tau	aGACTGct	GAGCAGAAT	gccttagaacctgaagggt...26...aacggaaggatta	aaaaaga-
E.Cab	aGACTGct	GAGCAGAAT	gccttagaacctgaagggt...27...-actgaatgatta	aaaaaacg
S.Sus	aGACTGct	GAGCAGAAT	gccttagaacctgaagggt...27...-actgaatgattg	aaaaaaaa
O.Avi	aGACTGct	GAGCAGAAT	gccttagaacctgaagggt...26...aacggaatgatta	aaaaaga-
L.Afr	aGACTGct	GAGCAGAAT	gccttataaacctgaagggt...26...aactgaataata	aaaaaga-
	*****	*****	***** * **	** ** *

id=478389 gene=ENSG0000085276 name=MECOM segment=chr3.168802550.168802617_-1 type=E3 VIEW

Figure 518: CS=9.1



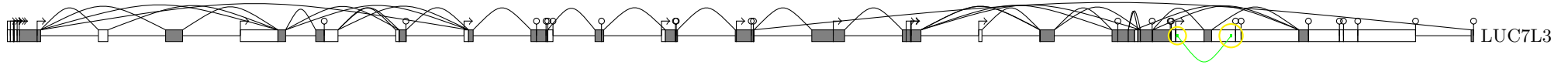
H. Sap	accacaca	a gtaagatatttg...4790...atTTTTGCTC	CAG	TTccaact
R. Mac	accacaca	a gtaagatatttcg...4487...atTTTTGCTC	CAG	TTccaact
P. Tro	accacaca	a gtaagatatttg...4930...atTTTTGCTC	CAG	TTccaact
P. Abe	accacaca	a gtaagatatttg...4831...atTTTTGCTC	CAG	TTccaact
C. Jac	accacaca	a gtaagatatttg...4494...atTTTTGCTC	CAG	TTccaact
C. Por	accacaca	a gtaagatatttg...4265...aatTTTTGCTC	CAG	TTccaagt
O. Cun	accacaca	a gtgagtatttg...4846...tTTTTGCTC	CAG	TTccaact
C. Fam	accacaca	a gtaagatatttg...4945...atTTTTGCTC	CAG	TTccaact
B. Tau	accacaca	a gtaagatatttg...4945...tTTTTGCTC	CAG	TTccaact
E. Cab	accacaca	a gtaagtaatttg...4945...atTTTTGCTC	CAG	TTccaact
S. Sus	accacaca	a gtaagatatttg...4945...atTTTTGCTC	CAG	TTccaact
O. Avi	accacaca	a gtaagatatttg...4945...tTTTTGCTC	CAG	TTccaact
L. Afr	accacaca	a gtaagatatttg...4945...atTTTTGCTC	CAG	TTccaact
*****	*	** * * * * * * * *	*****	*****

id=478370 gene=ENSG00000085276 name=MECOM segment=chr3.168825741.168830574_-1 type=IN

H. Sap	caagtcca	acagtagcatggctctttcatataggactatttaca	GACTGct	GAGCAGa
R. Mac	caagtcca	acagtagcatggctctttcatataggactatttaca	GACTGct	GAGCAGa
P. Tro	caagtcca	acagtagcatggctctttcatataggactatttaca	GACTGct	GAGCAGa
P. Abe	caagtcca	acagtagcatggctctttcatgtaggactatttaca	GACTGct	GAGCAGa
C. Jac	caagtcca	acagtagcatggctctttcatataggactatttaca	GACTGct	GAGCAGa
C. Por	caagtcca	acattagcgtggctctttcctgtaggactatttaca	GACTGct	GAGCAGa
O. Cun	caagtcca	acagtagcatggctctttcatataggactatttaca	GACTGct	GAGCAGa
C. Fam	caagtcca	gtagtagcatggctctttcatctaggactatttaaa	GACTGct	GAGCAGa
B. Tau	caagtcca	accgtagcatggctctttcacgtaggactatttaaa	GACTGct	GAGCAGa
E. Cab	caagtcca	acagtcacatggctctttcacatgggactacttaaa	GACTGct	GAGCAGa
S. Sus	caagtcca	acagtagcatggctctttcatgtaggactatttaaa	GACTGct	GAGCAGa
O. Avi	caagtcca	acagtagcatggctctttcacataggactatttaaa	GACTGct	GAGCAGa
L. Afr	caagtcca	acagtagcatggctcattcacataggactatttaaa	GACTGct	GAGCAGa
*****	*	* * * * * * * * *	*****	*****

id=478388 gene=ENSG00000085276 name=MECOM segment=chr3.168802618.168802661_-1 type=E3 VIEW

Figure 519: CS=9.1



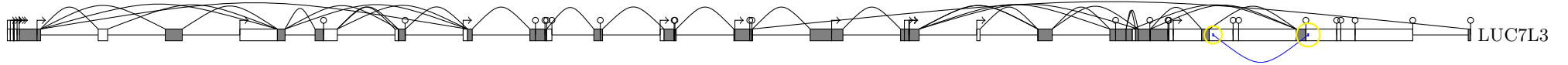
H. Sap	tattAAGT	CCATcTTGTGTTGGTACAT	tggcagagacatatgcttta----	195...	tacctcacacag	cgttggtg
R. Mac	tattAAGT	CCATcTTGTGTTGGTACATTGG	cagaacacatatgctttaaaa-	192...	tacctcacacag	cgttggtg
P. Tro	tattAAGT	CCATcTTGTGTTGGTACAT	tggcagagacatatgcttta----	195...	tacctcacacag	cgttggtg
P. Abe	tattAAGT	CCATcTTGTGTTGGTACAT	tggcagagacataacttta----	195...	tacctcacacag	cgttggtg
C. Jac	tattAAGT	CCATcTTGT	-----gttgatacattggc---	agaga...	205...	tacctcacacag
M. Mus	tattAAGT	CCATcTTGTGTTGGTACAT	tggcagaacacatatgcttta----	194...	tacctcacacag	cgttggtg
R. Nor	tattAAGT	CCATcTTGTGTTGGTACAT	tggcagaacacatatgcttta----	196...	tacctcacacag	cgttggtg
O. Cun	tattAAGT	CCATcTTGTGTTGGTACATTGG	cagagacatatgctttaaaaa.	191..	tacctcacacag	cgttggtg
C. Fam	tattAAGT	CCATcTTGTGTTGGTACATTGG	cagagacatatgctttaaaa-	192...	tacctcacacag	cgttggtg
F. Cat	tattAAGT	CCATcTTGTGTTGGTACATTGG	cagagacatatgctttaaca-	192..	tacctcacacag	cgttggtg
B. Tau	tattAAGT	CCATcTTGTGTTGGTACATTGG	cagagacatatgctttaaaa-	191..	tacctcacacag	cgttggtg
E. Cab	tattAAGT	CCATcTTGTGTTGGTACATTGG	cagagacatatgctttaaaa-	192..	tacctcacacag	cgttggtg
S. Sus	tattAAGT	CCATcTTGTGTTGGTACATTGG	cagagacatatgctttaaaa-	192..	tacctcacacag	cgttggtg
L. Afr	tattAAGT	CCATcTTGTGTTGGTACATTGG	cagagacataactttaaaa-	192..	tacctcacacag	cgttggtg
	*****	*****	* ** ** *	*	*****	*****

id=521881 gene=ENSG00000108848 name=LUC7L3 segment=chr17_48828412.48828657.1 type=AN

H. Sap	ctaagcag	gtactcatgccca...119...	-----cgtgaaaacttataaaacaa-	ATGTTAACAGaATGGa	ATTTtttttcaactgtatgtagggctgcagtggtgccag	aattagat
R. Mac	ctaagcag	gtactcatgccca...111...	gtgtattgcgtgaaaactta----	CCAAATGTTAACAGaATGGa	ATTTtttttcaactgtatgtagggctgcagtggtgccag	aattagat
P. Tro	ctaagcag	gtactcatgccca...119...	-----cgtgaaaacttataaaacaa-	ATGTTAACAGaATGGa	ATTTtttttcaactgtatgtagggctgcagtggtgccag	aattagat
P. Abe	ctaagcag	gtactcatgccca...119...	-----cgtgaaaacttataaaacaa-	ATGTTAACAGaATGGa	ATTTtttttcaactgtatgtagggctgcagtggtgccag	aattagat
C. Jac	ctaagcag	gtactcatgccca...124...	-----aacgtataaaacaaatgta-	ACAGaATGGa	ATTTtttttcaactgtgtgtagggctgcagtggtgccag	aattagat
M. Mus	ctaagcag	gtattcatgccca...119...	-----cgtgaaatcttacaagcct-	ATGTTAACAGaATGGa	ATTTtttttcaactgtgtgtagggatgcagtggtgcccag	aattagat
R. Nor	ctaagcag	gtattcatgccca...119...	-----cgtgaaatcttacaatcat-	ATGTTAACAGaATGGa	ATTTtttttcaactgtgtgtagggatgcagtggtgcccag	aattagat
O. Cun	ctaagcag	gtactcatgccca...116...	----attgcgtgaaaacttataaaa	GTCAAATGTTAACAGaATGGa	ATTTtttttcaactgtatgtagggatgcagtggtgcccag	aattagat
C. Fam	ctaagcag	gtactcatgccca...113...	----gtattgcgtgaaaacttaaa-	TCAAATGTTAACAGaATGGa	ATTTtttttcaactatgtagggatgcagtggtgcccag	aattagat
F. Cat	ctaagcag	gtactcatgccca...115...	----attgcgtgaaaacttataaa-	TCAAATGTTAACAGaATGGa	ATTTtttttcaactgtatgtagggatgcagtggtgcccag	aattagat
B. Tau	ctaagcag	gtactcatgccca...114...	----tattgcgtgaaaacttataaa-	TCAGATGTTAACAGaATGGa	ATTTtttttcaactgtgtgtagggatgcagtggtgcccag	aattagat
E. Cab	ctaagcag	gtactcatgccca...115...	----attgcgtgaaaacttataaa-	TCAAATGTTAACAGaATGGa	ATTTtttttcaactgtatgtagggatgcagtggtgcccag	aattagat
S. Sus	ctaagcag	gtactcatgccca...115...	----tattgcgtgaaaacttgtaa-	TCAAATGTTAACAGaATGGa	ATTTtttttcaactgtgtgtagggatgcagtggtgcccag	aattagat
L. Afr	ctaagcag	gtactcatgccca...118...	----tattgtgtgaaaactttaaa-	TCAAATGTTAACAGaATGGa	ATTTtttttcaactgtatgtagggatgcagtggtgcccag	aattagat
	*****	*** *****	* * *	*	*****	*****

id=521883 gene=ENSG00000108848 name=LUC7L3 segment=chr17_48828724.48828930.1 type=AN VIEW

Figure 520:



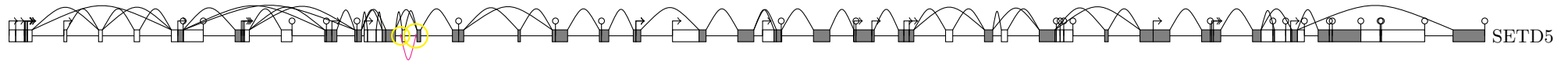
H. Sap	ctaagcag	gtactcatgccagggtactc	CTTTCTTACCAC	atccatggttgaatgctatt...142...	agtggggccag	aattagat
R. Mac	ctaagcag	gtactcatgccagggtactc	CTTTCTTACCAC	atccatggttgaatgctatt...138...	agtggggccag	aattagat
P. Tro	ctaagcag	gtactcatgccagggtactc	CTTTCTTACCAC	atccatggttgaatgctatt...142...	agtggggccag	aattagat
P. Abe	ctaagcag	gtactcatgccagggtactc	CTTTCTTACCAC	atccatggttgaatgctatt...142...	agtggggccag	aattagat
C. Jac	ctaagcag	gtactcatgccagggtactc	CTTTCTTACCAC	atccatggttgaatgctatt...141...	agtggggccag	aattagat
M. Mus	ctaagcag	gtattcatgccagggtactc	CTTTCTTACCAC	atccggttgaatgctatt...142...	agtggggccag	aattagat
R. Nor	ctaagcag	gtattcatgccagggtactc	CTTTCTTACCAC	atccggttgaatgctatt...142...	agtggggccag	aattagat
O. Cun	ctaagcag	gtactcatgccagggtactc	CTTTCTTACCAC	atccatggttgaatgctatt...144...	agtggggccag	aattagat
C. Fam	ctaagcag	gtactcatgccagggtactc	CTTTCTTACCAC	atccatggttgaatgctatt...140...	agtggggccag	aattagat
F. Cat	ctaagcag	gtactcatgccagggtactc	CTTTCTTACCAC	atccatggttgaatgctatt...142...	agtggggccag	aattagat
B. Tau	ctaagcag	gtactcatgccagggtactc	CTTTCTTACCAC	atccatggttgaatgctatt...141...	agtggggccag	aattagat
E. Cab	ctaagcag	gtactcatgccagggtactc	CTTTCTTACCAC	atccatggttgaatgctatt...142...	agtggggccag	aattagat
S. Sus	ctaagcag	gtactcatgccagggtactc	CTTTCTTACCAC	atccatggttgaatgctatt...142...	agtggggccag	aattagat
L. Afr	ctaagcag	gtactcatgccagggtactc	CTTTCTTACCAC	atccatggttgaatgctata...145...	agtggggccag	aattagat
*****	***	*****	*****	*****	*****	*****

id=521883 gene=ENSG00000108848 name=LUC7L3 segment=chr17_48828724_48828930.1 type=AN

H. Sap	aaagaaag	ctataGTGGcaTAGAaAAAG	tataaaagctcagttagtttt...216...	tattcgtgtgaa	tcagacta
R. Mac	aaagaaag	ctataGTGGcaTAGAaAAAG	tataaaagctcagttagtttt...219...	tattcgtgtgaa	tcagacta
P. Tro	aaagaaag	ctataGTGGcaTAGAaAAAG	tataaaagctcagttagtttt...219...	tattcgtgtgaa	tcagacta
P. Abe	aaagaaag	ctataGTGGcaTAGAaAAAG	tataaaagctcagttagtttt...216...	tattcgtgtgaa	tcagacta
C. Jac	aaagaaag	ctataGTGGcaTAGAaAAAG	tataaaagctcagttagtttt...213...	tattcgtgtgaa	tcagacta
M. Mus	aaagaaag	ctataGTGGcaTAGAaAAAG	tataaaagctcagttagttat...222...	tgctcatgtgga	gcagactg
R. Nor	aaagaaag	ctataGTGGcaTAGAaAAAG	tataaaagctcagttagttat...225...	tattcgtgtgaa	gcagactg
O. Cun	aaagaaag	ctataGTGGcaTAGAaAAAG	tataaaagctcagttagttgt...240...	tatttgtgtgaa	tcaacta
C. Fam	aaagaaaa	ctataGTGGcaTAGAaAAAG	tataaaagctcagttagttgt...249...	tatttgtgtaa	tcagacta
F. Cat	aaagaaaa	ctataGTGGcaTAGAaAAAG	tagaaagctcagttagttgt...224...	tatttgtgtgaa	tcagatta
B. Tau	aaagaaaa	ctataGTGGcaTAGAaAAAG	tataaaagctcagttagtttt...219...	tatttgtgtgaa	tcagacta
E. Cab	aaagaaaa	ctataGTGGcaTAGAaAAAG	tataaaagctcagttagttgt...216...	tatttgtgtgaa	tcagacta
S. Sus	aaagaaaa	caataGTGGcaTAGAaAAAG	tataaaagctcagttagttgt...208...	tatttgtgtgaa	tcagacta
L. Afr	aaagaaag	ctataGTGGcaTAGAaAAAG	tataaaagctcagttagttct...217...	atttgggtgaa	tcagacta
*****	*	*****	*****	*	*****

id=521887 gene=ENSG00000108848 name=LUC7L3 segment=chr17_48829644_48829911.1 type=AN VIEW

Figure 521:



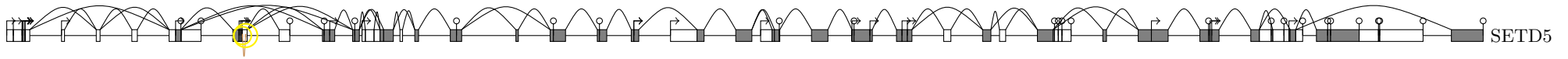
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C. Jac	aagtgcag	gtaagatcctgttccatctaaatttaagctcgggttgc-tgggattagggtttcttactagta	GGGAAAAGCT	AAAGTATTCTTC	ttgtgtttgtaaatgtag	atgattcc
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P. Tro	tgactag	gtgagaattgct...126...atgatgtgatgcatgctgtt	GGAAGGAc	TACTTTa	AGTTTat	TTTCC	ctcttag	gggaatga
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R. Nor	tgactag	gtgagaattgct...125...gtgatatgctgcatgctgtt	GGAAGGAc	TACTTTa	AGTTTat	TTTCC	ctcttag	gggaatga
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Figure 522:



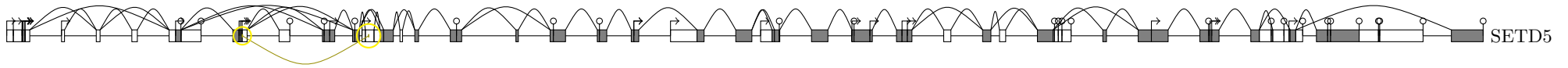
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M. Mus	ctattcca	ggcagtacca	GGGATTAGGGTCT	GGGCTGGa
R. Nor	ctattcca	ggcagtacca	GGGATTAGGGTCT	GGGCTGGa
C. Por	ctattcca	ggcagtacca	GGGATTAGGGTCT	GGGCTGGa
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E. Cab	ctattcca	ggcagtacca	GGGATTAGGGTCT	GGGCTGGa
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L. Afr	taggggtct	ggtctggaaaaatcctgggtgttttgaatatgttcagg	TCCAGTTCAGACTCT	GATCCC	acagccacttcttgagtgag	gtgggtgt
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Figure 523:



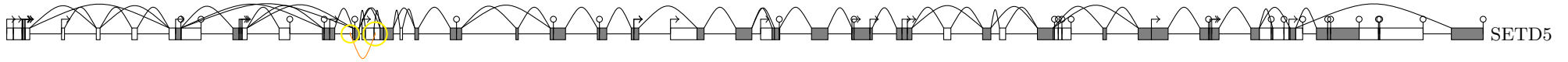
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R. Nor	ctattcca	ggcagtac	CAGGgATTAGGTCT	ggGCTGGa
C. Por	ctattcca	ggcagtac	CAGGgATTAGGTCT	ggGCTGGa
O. Cun	ctattcca	ggcagtac	CAGGgATTAGGTCT	ggGCTGGa
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O. Avi	ctattcca	ggcagtac	CAGGgATTAGGTCT	ggGCTGGa
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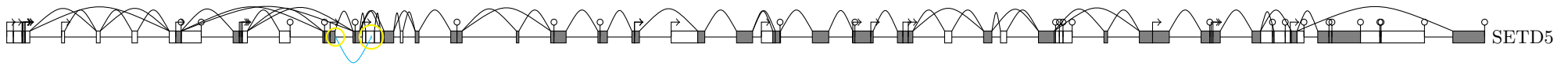
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P. Abe	aacgaagg	gtac	TACTTTCTTCTTT	ctttccat	atgtacc	atact-...46..	tcttattttcag	gatcataa
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M. Mus	aacgaagg	G	TACTACTTTTCTTCTTT	ctttccat	atgtacc	atact-...46..	tcttattttcag	gatcataa
C. Por	aacgaagg	gtac	TACTTTCTTCTTT	ctttccat	atgtacc	atact-...45..	tcttattttcag	gatcataa
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E. Cab	aacgaagg	gtac	TACTTTCTTCTTT	ctttccat	atgtacc	atact-...46..	tcttattttcag	gatcataa
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Figure 525:



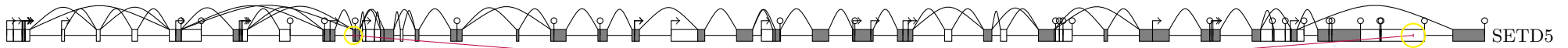
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E. Cab	atatgcag	catgacgaagt...42...	gcatcattgttctgttttt	ATGT	CCAGTTGA	ccttggcattttgtttatcactttcctggttgaagccaaaaacgaagg	gtactact
O. Avi	atatgcag	catgacgaagt...42...	gcatcattgttctgttttt	ATGT	CCAGTTGA	ccttggcattttgtttatcactttcctggttgaagccaaaaacgaagg	gtactact
L. Afr	atatgcag	catgacgaagt...42...	gcatcattgttctgttttt	ATGT	CCAGTTGA	ccttggcattttgtttatcactttcctggttgaagccaaaaacgaagg	gtactact
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Figure 526:



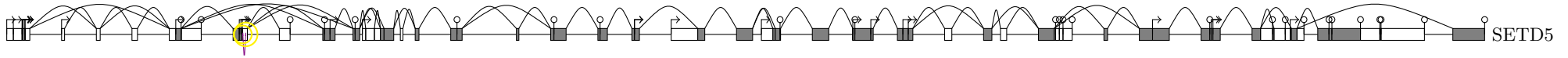
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R.Mac	ctcagctg	gtacgttt	gtgt...232..	atcatgcattgcttttcgcc	TTTGtGCAG	CCCTGaat
P.Abe	ctcagctg	gtacgttt	gtgt...241..	atcatgcattgcttttcgcc	TTTGtGCAG	CCCTGaat
R.Nor	ctctgctg	gtacgttt	gtgt...227..	atcatgcgttgcttttcgcc	TTTGtGCAG	CCCTGaat
C.Por	ctcagctg	gtacgttt	gtgt...241..	atcatacgttgcttttcgcc	TTTGtGCAG	CCCTGaat
O.Cun	ctcagctg	gtacgttt	atgt...241..	atcatgcattgcttttcgcc	TTTGtGCAG	CCCTGaat
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F.Cat	ctcagctg	gtacgttt	gtgt...239..	atcatgcgttgcttttcgcc	TTTGtGCAG	CCCTGaat
B.Tau	ctcagctg	gtacgttt	gtgt...241..	atcatgcattgcttttcgcc	TTTGtGCAG	CCCTGaat
E.Cab	ctcagctg	gtacgttt	gtgt...241..	atcatgcgttgcttttcgcc	TTTGtGCAG	CCCTGaat
O.Avi	ctcagctg	gtacgttt	gtgt...241..	atcatgcgttgcttttcgcc	TTTGtGCAG	CCCTGaat
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R.Mac	aaaaaaa	g-----ttttcaaagga...1453..	ccccagccactctgtgtggg	CAGGgtGCTGTCAAG	accagacctcttgggggggt...144..	aaaagttgagaa	cttctttg
P.Abe	aaaaaaa	g-----ttttcaaagga...1445..	ccccagccactctgtgtggg	CAGGgtGCTGTCAAG	accagacctcttgggggggt...144..	taaagttgagaa	cttctttg
R.Nor	aataataa	tttttttttctt-----...1399..	ccccagccactctgtgtggg	CAGGgtGCTGTCAAG	accagacctctgggggggag...138..	taatgttaagaa	tgtatttg
C.Por	ttaaagaa	gtttttatttca-----...1426..	ccccagccactctgtgtggg	CAGGgtGCTGTCAAG	accagacctctgggggggtg...128..	taaagttgaaaa	tgtttttg
O.Cun	-----aac	attttcttttcaaagga...1438..	ccccagccactctgtgtggg	CAGGgtGCTGTCAAG	accagacctctgggggggtt...145..	taaagttgagaa	cttctttg
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E.Cab	-----ttt	tttttcttttcaaagga...1447..	ccccagccactctgtgtggg	CAGGgtGCTGTCAAG	accagacctctgggggggt...142..	taaagttgagaa	cttctttg
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Figure 527:



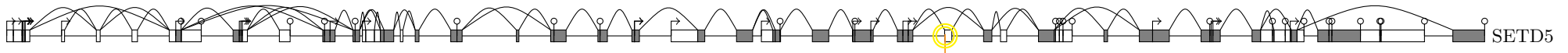
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P.Tro	tAGGGTCT	GGGCTGGA	aaaatcctggtgttttgaat...39...ttcttgagtgag	gtgggtgt
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C.Jac	tAGGGTCT	GGGCTGGA	aaaatcctggtgttttgaat...39...ttcttgagtgag	gtgggtgt
M.Mus	tAGGGTCT	GGGCTGGA	aaaatcctggtgttttgaat...39...ttcttgagtgag	gtgggtgt
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C.Por	tAGGGTCT	GGGCTGGA	aaaatcctggtgttttgaat...39...ttcttgagtgag	gtgggtgt
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C.Fam	tAGGGTCT	GGGCTGGA	aaaatcctggtgttttgaat...39...ttcttgagtgag	gtgggtgt
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B.Tau	tAGGGTCT	GGGCTGGA	aaaatcctggtgttttgaat...39...ttcttgagtgag	gtgggtgt
E.Cab	tAGGGTCT	GGGCTGGA	aaaatcctggtgttttgaat...39...ttcttgagtgag	gtgggtgt
O.Avi	tAGGGTCT	GGGCTGGA	aaaatcctggtgttttgaat...39...ttcttgagtgag	gtgggtgt
L.Afr	tAGGGTCT	GGtCTGGA	aaaatcctggtgttttgaat...39...ttcttgagtgag	gtgggtgt
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id=484692 gene=ENSG00000168137 name=SETD5 segment=chr3_9471657_9471735_1 type=AN

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R.Mac	tagggtct	gggctggaaaaatcctggtgttttgaat	atggttcagg	TCCAGTTCAGACTCT	tgatcccacagccacttcttgagtgag	gtgggtgt
P.Tro	tagggtct	gggctggaaaaatcctggtgttttgaat	atggttcagg	TCCAGTTCAGACTCT	tgatcccacagccacttcttgagtgag	gtgggtgt
P.Abe	tagggtct	gggctggaaaaatcctggtgttttgaat	atggttcagg	TCCAGTTCAGACTCT	tgatcccacagccacttcttgagtgag	gtgggtgt
C.Jac	tagggtct	gggctggaaaaatcctggtgttttgaat	atggttcagg	TCCAGTTCAGACTCT	tgatcccacagccacttcttgagtgag	gtgggtgt
M.Mus	tagggtct	gggctggaaaaatcctggtgttttgaat	atggttcagg	TCCAGTTCAGACTCT	tgatcccacagccacttcttgagtgag	gtgggtgt
R.Nor	tagggtct	gggctggaaaaatcctggtgttttgaat	atggttcagg	TCCAGTTCAGACTCT	tgatcccacagccacttcttgagtgag	gtgggtgt
C.Por	tagggtct	gggctggagaaaatcctggtgttttgaat	atggttcagg	TCCAGTTCAGACTCT	tgatcccacagccacttcttgagtgag	gtgggtgt
O.Cun	tagggtct	gggctggaaaaatcctggtgttttgaat	atggttcagg	TCCAGTTCAGACTCT	tgatcccacagccacttcttgagtgag	gtgggtgt
C.Fam	tagggtct	gggctggaaaaatcctggtgttttgaat	atggttcagg	TCCAGTTCAGACTCT	tgatcccacagccacttcttgagtgag	gtgggtgt
F.Cat	tagggtct	gggctggaaaaatcctggtgttttgaat	atggttcagg	TCCAGTTCAGACTCT	tgatcccacagccacttcttgagtgag	gtgggtgt
B.Tau	tagggtct	gggctggaaaaatcctggtgttttgaat	atggttcagg	TCCAGTTCAGACTCT	tgatcccacagccacttcttgagtgag	gtgggtgt
E.Cab	tagggtct	gggctggaaaaatcctggtgttttgaat	atggttcagg	TCCAGTTCAGACTCT	tgatcccacagccacttcttgagtgag	gtgggtgt
O.Avi	tagggtct	gggctggaaaaatcctggtgttttgaat	atggttcagg	TCCAGTTCAGACTCT	tgatcccacagccacttcttgagtgag	gtgggtgt
L.Afr	tagggtct	ggtctggaaaaatcctggtgttttgaat	atggttcagg	TCCAGTTCAGACTCT	tgatcccacagccacttcttgagtgag	gtgggtgt
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Figure 528:



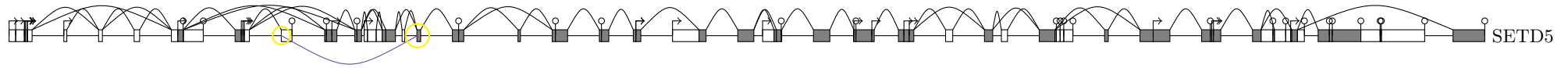
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P.Tro	gtaagaag	gtatgtctgtgt...809...-ctggaacacccttttctctt	ATCCtcAG	ATCTGGAt
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C.Por	gtaaaaag	gtatgtctgtgt...716...-ctggaacatccttttctctt	ATCCtcAG	ATCTGGAt
O.Cun	gtaaaaag	gtatgtctgttt...776...-ctggaacacccttttctctt	ATCCtcAG	ATCTGGAt
C.Fam	gtaaaaag	gtatgtctatgt...804...-ctggaacatccttttctctt	ATCCtcAG	ATCTGGAt
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B.Tau	gtaaaaag	gtatgtttacgt...722...-ctggaacacccttttctctt	ATCCtcAG	ATCTGGAt
E.Cab	gtaaaaag	gtatgtctatgt...775...-ctggaacatccttttctctt	ATCCtcAG	ATCTGGAt
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L.Afr	gtaagaag	gtatgtctatgt...755...-ctggaacacccttttctctt	ATCCtcAG	ATCTGGAt
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P.Abe	aTCCtcAG	ATCTGGAT	tcaggctgccttcctcagtg--...73...-ctccaactccag	gcaggtct
C.Jac	aTCCtcAG	ATCTGGAT	tcaggctgccttcctcagtg--...73...-ctacaactccag	gcaggtct
R.Nor	aTCCtcAG	ATCTGGAT	tcaggctgcc-ccctcagcgtc...62...gtctcaactcca-	gcaggtct
C.Por	aTCCtcAG	ATCTGGAT	tcaggctgccttcctcagtg--...73...-ctccaactccag	gcaggtct
O.Cun	aTCCtcAG	ATCTGGAT	tcaggctgccttcctcagtg--...73...-ctccaactccag	gcaggtct
C.Fam	aTCCtcAG	ATCTGGAT	tcaggctgccttcctcagtg--...73...-ctccaactccag	gcaggtct
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B.Tau	aTCCtcAG	ATCTGGAT	tcaggctgccttcctcagtg--...73...-ctccaactccag	gcaggtct
E.Cab	aTCCtcAG	ATCTGGAT	tcaggctgccttcctcagtg--...73...-ctccaactccag	gcaggtct
S.Sus	aTCCtcAG	ATCTGGAT	tcaggctgccttcctcagtg--...73...-ctccagctccag	gcaggtct
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Figure 529: CS=4.2



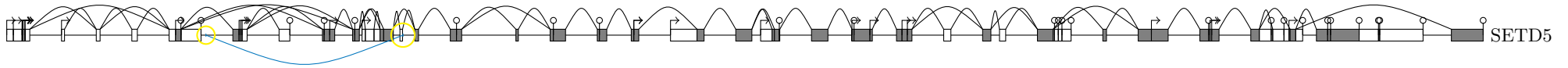
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P.Tro	tgagtgag	gtgggtgttgct...1622...ccacaataacattttattt	TTATTCCTAG	Acttgcac
P.Abe	tgagtgag	gtgggtgttgct...1613...ccacaaaatacattttattt	TTATTCCTAG	Acttgcac
C.Jac	tgagtgag	gtgggtgttgct...1605...ccacaataacattttattt	TTATTCCTAG	Acttgcac
M.Mus	tgagtgag	gtgggtgttgct...1720...ccacaataacattttattt	TTATTCCTAG	Acttgcac
R.Nor	tgagtgag	gtgggtgttgct...1698...ccacaatgtacgtttattt	TTATTCCTAG	Acttgcac
C.Por	tgagtgag	gtgggtgttgct...1467...ccacaataacattttattt	TTATTCCTAG	Acttgcac
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B.Tau	tgagtgag	gtgggtgttgct...1649...acacaataacattttattt	TTATTCCTAG	Acttgcac
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L.Afr	tgagtgag	gtgggtgttgct...1560...ccacaataacattttattt	TTATTCCTAG	Acttgcac
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P.Tro	tgcactag	gtgagaattgct...156...-ctttaagtttattttccctc	TTTAG	GGGaATGa
P.Abe	tgcactag	gtgagaattgct...156...-ctttaagtttattttccctc	TTTAG	GGGaATGa
C.Jac	tgcactag	gtgagaattgct...156...-ctttaagtttattttccctc	TTTAG	GGGaATGa
M.Mus	tgcactag	gtgagaattgct...158...-ctttaagtttattttccctc	TTTAG	GGGaATGa
R.Nor	tgcactag	gtgagaattgct...155...-ctttaagtttattttccctc	TTTAG	GGGaATGa
C.Por	tgcactag	gtgagaattgct...154...actttaagtttatttt-cctc	TTTAG	GGGaATGa
O.Cun	tgcactag	gtgagaattgct...155...-ctttaagtttattttccctc	TTTAG	GGGaATGa
C.Fam	tgcactag	gtgagaattgct...156...-ctttaagtttattttccctc	TTTAG	GGGaATGa
B.Tau	tgcactag	gtgagaattgct...156...-ctttaagtttattttccctc	TTTAG	GGGaATGa
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Figure 530: CS=11.7



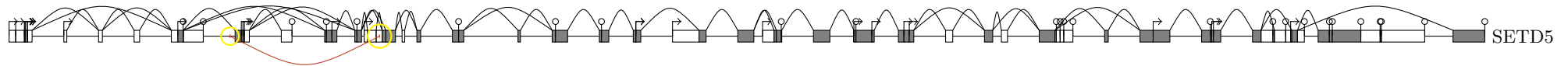
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C. Jac	ttctgtag	aattaatgatta...35...actgattttccttgaagtc	TCTTCCTATGTA	cttcccattgttctagagta-...392...ccttgcttacag	aaaggaag
M. Mus	ttctaaag	agttaattctga...25...actgattttccttgaagtc	TCTTCCTATGTA	cttgcattattctagaata-...385...ccttgcttacag	aaaggaag
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O. Cun	ttttgtag	agttaatgatta...35...actgattttccttgaagtc	TCTTCCTATGTA	cttccattgttctagaata-...383...ccttgcttacag	aaaggaag
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L. Afr	ttctgtag	agttaatgatta...37...actgattttccttgaagtc	TCTTCCTATGTA	cttccaattg-ttagaata-...388...ccttgcttacag	aaaggaag
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P. Tro	tGCAC TAG	GtGAGA	attgctgacaacaaggaatg...155...ttccctccttag	gggaatga
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R. Nor	tGCAC TAG	GtGAGA	attgctgacaacaaggaatg...154...ttccctccttag	gggaatga
C. Por	tGCAC TAG	GtGAGA	attgctgacaacaaggaatg...153...ttccctccttag	gggaatga
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Figure 531:



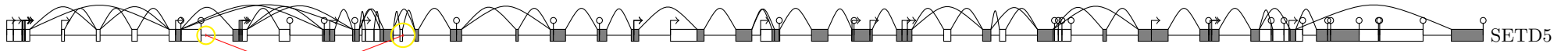
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R. Mac	ttctgtag	agttaatgatta...377...taaatTTTTAGTcttttTgta-	TCCCTTCTCTTTAAGT	-----	tgccaagattccccctgctcacagatt-ccccctgttgctcttttacctcccttgtagcccaatcttccttgcttacag	aaaggaag
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C. Fam	aacaaagg	gtactactttctttctttctttccat	atgtaccat	ACTTTAGGGGAGA	gAGGGG	ccagtgtttggacactgttgatt	taaaaaatcttattttcag	gatcataa
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L. Afr	aacaaagg	gtactactttctttctttctttccat	atgtaccat	ACTTTAGGGGAGA	gAGGGG	ccagtgtttggacactgttgatt	taaaaaatcttattttcag	gatcataa
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Figure 532:



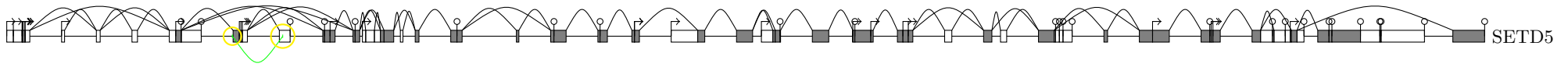
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P. Tro	taatgtag	atgattccttagtgctccttggctcgaattctc	TGCAcTAG	GtGAGAat
P. Abe	taatgtag	atgattccttagtgctccttggctcgaattctc	TGCAcTAG	GtGAGAat
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M. Mus	taatgtag	atgattccttagtgctccttggctcgaattctc	TGCAcTAG	GtGAGAat
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C. Por	taatgtag	atgattccttagtgctccttggctcgaattctc	TGCAcTAG	GtGAGAat
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B. Tau	taatgtag	atgattccttagtgctccttggctcgaattctc	TGCAcTAG	GtGAGAat
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Figure 533:



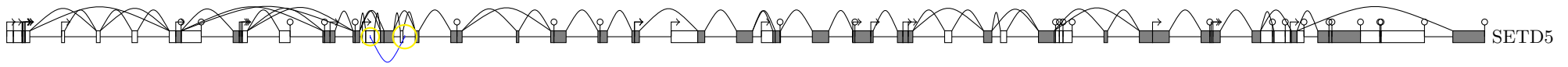
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Figure 534:



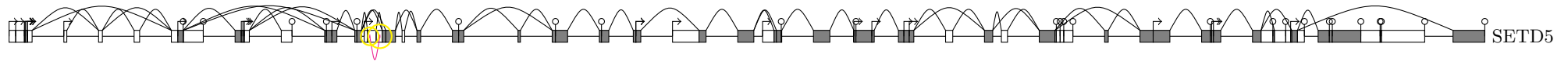
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B. Tau	atatgcag	catgacgaagtt...25...agcggacgtctagccctgcaTCATtgTTCTTGTtttatgtcccagttgacctt...34...aaaaacgaagg	gtactact
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Figure 535:



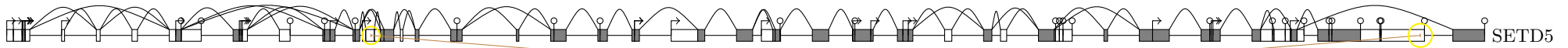
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R. Mac	aacgaagg	gtactactttcttcttcttccat	atgtaccatactttagg	GGAGagAGGGGccAGTGttTGGAcactgttgatttaaaaaatcttattttcag	gatcataa
P. Tro	aacaaagg	gtactactttcttcttcttccat	atgtaccatactttagg	GGAGagAGGGGccAGTGttTGGAcactgttgatttaaaaaatcttattttcag	gatcataa
P. Abe	aacgaagg	gtactactttcttcttcttccat	atgtaccatactttagg	GGAGagAGGGGccAGTGttTGGAcactgttgatttaaaaaatcttattttcag	gatcataa
C. Jac	aacgaagg	gtactactttcttcttcttccat	atgtaccatactttagg	GGAGagAGGGGccAGTGttTGGAcactgttgatttaaaaaatcttattttcag	gatcataa
M. Mus	aacgaagg	gtactactttcttcttcttccat	atgtaccatactttagg	GGAGagAGGGGccAGTGttTGGAcactgttgatttaaaaaatcttattttcag	gatcataa
R. Nor	aacgaagg	gtactactttcttcttcttccat	atgtaccatactttagg	GGAGagAGGGGccAGTGttTGGAcactgttgatttaaaaaatcttattttcag	gatcataa
C. Por	aacgaagg	gtactactttcttcttcttccat	atgtaccatactttagg	GGAGagAGGGGccAGTGttTGGAcactgttgatttaaaaaatcttattttcag	gatcataa
O. Cun	aacgaagg	gtactactttcttcttcttccat	atgtaccatactttagg	GGAGagAGGGGccAGTGttTGGAcactgttgatttaaaaaatcttattttcag	gatcataa
C. Fam	aacaaagg	gtactactttcttcttcttccat	atgtaccatactttagg	GGAGagAGGGGccAGTGttTGGAcactgttgatttaaaaaatcttattttcag	gatcataa
B. Tau	aacgaagg	gtactactttcttcttcttccat	atgtaccatactttagg	GGAGagAGGGGccAGTGttTGGAcactgttgatttaaaaaatcttattttcag	gatcataa
E. Cab	aacgaagg	gtactactttcttcttcttccat	atgtaccatactttagg	GGAGagAGGGGccAGTGttTGGAcactgttgatttaaaaaatcttattttcag	gatcataa
O. Avi	aacgaagg	gtactactttcttcttcttccat	atgtaccatactttagg	GGAGagAGGGGccAGTGttTGGAcactgttgatttaaaaaatcttattttcag	gatcataa
L. Afr	aacaaagg	gtactactttcttcttcttccat	atgtaccatactttagg	GGAGagAGGGGccAGTGttTGGAcactgttgatttaaaaaatcttattttcag	gatcataa
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id=484705 gene=ENSG00000168137 name=SETD5 segment=chr3_9475866_9475960_1 type=AN VIEW

Figure 536:



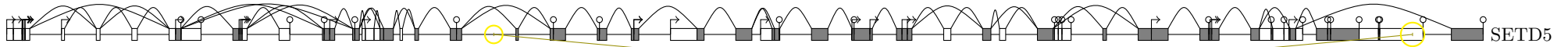
H. Sap	atatgcag	catgacgaagtt...36...agccctgcatcattgttctt	GTTT	tt	ATGT	cc	CAGT	tgaccttggcattttgttttatcactttcctggttgaagccaaaaacgaagg	gtactact
R. Mac	atatgcag	catgacgaagtt...36...agccctgcatcattgttctt	GTTT	tt	ATGT	cc	CAGT	tgaccttggcattttgttttatcactttcctggttgaagccaaaaacgaagg	gtactact
P. Abe	atatgcag	catgacgaagtt...36...agccctgcatcattgttctt	GTTT	tt	ATGT	cc	CAGT	tgaccttggcattttgttttatcactttcctggttgaagccaaaaacgaagg	gtactact
R. Nor	atatgcag	catgacgaagtt...36...agccctgcatcattgttctt	GTTT	tt	ATGT	cc	CAGT	tgaccttggcattttgttttatcactttcctggttgaagccaaaaacgaagg	gtactact
C. Por	atatgcag	catgacgaagtt...36...agccctgcatcattgttctt	GTTT	tt	ATGT	cc	CAGT	tgaccttggcattttgttttatcactttcctggttgaagccaaaaacgaagg	gtactact
O. Cun	atatgcag	catgatgaagtt...36...agccctgcatcattgttctt	GTTT	tt	ATGT	cc	CAGT	tgaccttggcattttgttttatcactttcctggttgaagccaaaaacgaagg	gtactact
C. Fam	atatgcag	catgacgaagtt...36...agccctgcatcattgttctt	GTTT	tt	ATGT	cc	CAGT	tgaccttggcattttgttttatcactttcctggttgaagccaaaaacgaagg	gtactact
F. Cat	atatgcag	catgacgaagtt...37...agccctgcatcattgttttt	GTTT	tt	ATGT	cc	CAGT	tgaccttggcattttgttttatcactttcctggttgaagccaaaaacgaagg	gtannnnn
B. Tau	atatgcag	catgacgaagtt...36...agccctgcatcattgttctt	GTTT	tt	ATGT	cc	CAGT	tgaccttggcattttgttttatcactttcctggttgaagccaaaaacgaagg	gtactact
E. Cab	atatgcag	catgacgaagtt...36...agccctgcatcattgttctt	GTTT	tt	ATGT	cc	CAGT	tgaccttggcattttgttttatcactttcctggttgaagccaaaaacgaagg	gtactact
O. Avi	atatgcag	catgacgaagtt...36...agccctgcatcattgttctt	GTTT	tt	ATGT	cc	CAGT	tgaccttggcattttgttttatcactttcctggttgaagccaaaaacgaagg	gtactact
L. Afr	atatgcag	catgacgaagtt...36...agccctgcatcattgttctt	GTTT	tt	ATGT	cc	CAGT	tgaccttggcattttgttttatcactttcctggttgaagccaaaaacgaagg	gtactact
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id=484704 gene=ENSG00000168137 name=SETD5 segment=chr3_9475729_9475865_1 type=AN

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R. Mac	aaaaaaaa	g----ttttcaaagga...1563...aagtggagtgtttacacctt	GCTG	ta	ACAT	tt	GAAC	tttcacaagagatgtaataa...33...aaaagttgagaa	cttctttg
P. Abe	aaaaaaaa	g----ttttcaaagga...1555...aagtggagtgtttacacctt	GCTG	ta	ACAT	tt	GAAC	tttcacaagagatgtaataa...33...taaagttgagaa	cttctttg
R. Nor	aataataa	tttttttttctt----...1503...aagtggagtgtttacacctt	GCTG	ta	ACAT	tt	GAAC	tttcacaagagatgtaataa...33...taatgttaagaa	tgtatttg
C. Por	ttaaagaa	gtttttatttca----...1520...aagtggagtgtttacacctt	GCTG	ta	ACAT	tt	GAAC	tttcacaagagatgtaataa...33...taaagttgaaa	tgtttttg
O. Cun	----aac	attttcttttcaaagga...1549...aagtggagtgtttacacctt	GCTG	ta	ACAT	tt	GAAC	tttcacaagagatgtaataa...33...taaagttgagaa	cttctttg
C. Fam	----aaa	gttttcttttcagagga...1528...aagtggagtgtttacacctt	GCTG	ta	ACAT	tt	GAAC	tttcacaagagatgtaataa...31...caaagttgagaa	cttctttg
F. Cat	ccaaaaaa	gttttcttttca----...1542...aagtggagtgtttacacctt	GCTG	ta	ACAT	tt	GAAC	tttcacaagagatgtaataa...33...tcaagttgagaa	cttctttg
B. Tau	agaagaa	g----ttttcaaagga...1517...aagtggagtgtttacacctt	GCTG	ta	ACAT	tt	GAAC	tttcacaagagatgtaataa...32...ataagttgagaa	cttctttg
E. Cab	----ttt	tttttcttttcaaagga...1555...aagtggagtgtttacacctt	GCTG	ta	ACAT	tt	GAAC	tttcacaagagatgtaataa...33...taaagttgagaa	cttctttg
O. Avi	agaaaaaa	g----ttttcaaagga...1520...aagtggagtgtttacacctt	GCTG	ta	ACAT	tt	GAAC	tttcacaagagatgtaataa...32...ataagttgagaa	cttctttg
L. Afr	aaaaaat	c----ttttcaaagga...1568...aagtggagtgtttacacctt	GCTG	ta	ACAT	tt	GAAC	tttcacaaagatgtaataa...33...ggaagttgagaa	cttctttg
		**	*****	*****	*****	*****	*****	* ** * **	* ** **

id=484785 gene=ENSG00000168137 name=SETD5 segment=chr3_9518163_9519838_1 type=AN VIEW

Figure 537:



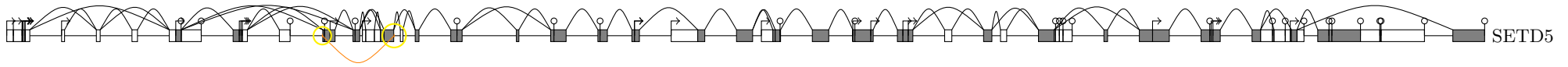
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R. Mac	aaatcaag	gtatgtaggta... 524...	actttgtgcttctaggtga	CTTGTTACCCCTT	gt	TAAGGGA	TGGTCTT	TG	tttccttcttagttcaaaa... 313...	tccttgggatag	gcatttcg
P. Abe	aaatcaag	gtatggaggta... 529...	actttgtgcttctaggtga	CTTGTTACCCCTT	gt	TAAGGGA	TGGTCTT	TG	tttccttcttagttcaaaa... 310...	tccttgggatag	gcatttcg
R. Nor	agatcaag	gtatgcagtata... 527...	cacttgctcacccttataa	-----	-----	AGGGA	TGGTCTT	TTG	tctccttcttaattcaaaa... 303...	tccttgggatag	gcatttcg
C. Por	agatcaag	gtatggagggtt... 565...	-acttgctcaccctgttaa	-----	-----	GGGA	TGGTCTT	TG	tttcttcttaattcaaac... 304...	tccttgggatag	gcatttcg
O. Cun	aaatcaag	gtatggagggtg... 525...	gacttgcccaccctgtta	-----	-----	AGGGA	TGGTCTT	TG	ttccttcttaattcacaac... 277...	tccttgggatag	gcatttcg
C. Fam	aaatcaag	gtatggaggta... 543...	gacttgcccaccctgtta	-----	-----	AGGGA	TGGTCTT	TG	ttccttcttaattcaaaa... 316...	tccttgggatag	gcatttcg
F. Cat	aaatcaag	gtatggagagta... 542...	gacttgcccaccctgtta	-----	-----	AGGGA	TGGTCTT	TG	ttccttcttaattcaaaa... 311...	tccttgggatag	gcatttcg
B. Tau	aaatcaag	gtatggaggta... 547...	gacttgcccacccttatta	-----	-----	AGGGA	TGGTCTT	TG	ttccttcttaattcaa--... 317...	tccttgggatag	gcatttcg
E. Cab	aaatcaag	gtatgaaggata... 538...	gacttgcccaccctgtta	-----	-----	AGGGA	TGGTCTT	TG	ttccttcttaattcaaaa... 317...	tccttgggatag	gcatttcg
O. Avi	aaatcaag	gtatggaggta... 546...	gacttgcccacccttatta	-----	-----	AGGGA	TGGTCTT	TG	ttccttcttaattcaa--... 317...	tccttgggatag	gcatttcg
L. Afr	aaatcaag	gtatggaggta... 542...	---tgttgctcctagatgacttg	CCCACCCTT	g	CTAAGGGA	TGGTCTT	TG	ttccttcttaattcaaaa... 318...	tccttgggatag	gcatttcg
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id=484715 gene=ENSG00000168137 name=SETD5 segment=chr3_9477591_9478533_1 type=IN

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R. Mac	aaaaaaaa	g-----ttttcaagga... 1464...	ctgtgtgggcagggtgctgt	CAAGACCAG	CCTCTTGGGGGGGT	ag	GGGCGGG	ggggt-ggggggaactcttgg... 115...	aaaagttgagaa	cttctttg	
P. Abe	aaaaaaaa	g-----ttttcaagga... 1456...	ctgtgtgggcagggtgctgt	CAAGACCAG	CCTCTTGGGGGGGT	ag	GGGCGGG	ggggt-ggggggaactcttgg... 115...	taaagttgagaa	cttctttg	
R. Nor	aataataa	ttttttttctt-----... 1410...	ctgtgtgggcagggtgctgt	CAAGACCAG	CCTCT	-----	-----	gggggggaggtgggggag-----... 127...	taatgtaagaa	tgtatttg	
C. Por	ttaaagaa	gtttttatttca-----... 1437...	ctgtgtgggcagggtgctgt	CAAGACCAG	CCTC	-----	-----	ctggggggtggggggctct-----... 118...	taaagttgaaa	tgtttttg	
O. Cun	-----aac	attttcttttcaagga... 1449...	ctgtgtgggcagggtgctgt	CAAGACCAG	CCTCT	-----	-----	gggggggttggggcgggg-----... 134...	taaagttgagaa	cttctttg	
C. Fam	-----aaa	gttttctttcagagga... 1430...	ctgtgtgggcagggtgctgt	CAAGACCAG	CCTCT	-----	-----	ggggggggtggggcgggg-----... 130...	caaagttgagaa	cttctttg	
F. Cat	ccaaaaaa	gttttcttttca-----... 1443...	ctgtgtgggcagggtgctgt	CAAGACCAG	CCTCT	-----	-----	ggggggggtggggcgggg-----... 133...	tcaagttgagaa	cttctttg	
B. Tau	agaaaagaa	g-----ttttcaagga... 1421...	-tgtgtgggcagggtgctgtc	AAGACCAG	CCTCT	-----	-----	ggggggggtggggcgggg-----... 130...	ataagttgagaa	cttctttg	
E. Cab	-----ttt	tttttcttttcaagga... 1458...	ctgtgtgggcagggtgctgt	CAAGACCAG	CCTCT	-----	-----	ggggggggtggggcgggg-----... 131...	taaagttgagaa	cttctttg	
O. Avi	agaaaaaa	g-----ttttcaagga... 1422...	-tgtgtgggcagggtgctgtc	AAGACCAG	CCTCT	-----	-----	ggggggggtggggcgggg-----... 132...	ataagttgagaa	cttctttg	
L. Afr	aaaaaaaa	c-----ttttcaagga... 1469...	ctgtgtgggcagggtgctgt	CAAGACCAG	CCTCTTGGGGGGGGTGGG	g	g	ggg-cggggtggggggaact-----... 120...	ggaagttgagaa	cttctttg	
		**	*****					***	**	***	***

id=484785 gene=ENSG00000168137 name=SETD5 segment=chr3_9518163_9519838_1 type=AN VIEW

Figure 538: CS=3.6



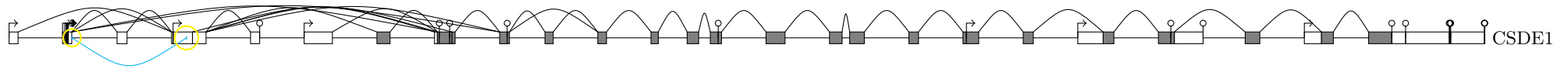
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R.Mac	atgtttca	ctccatgtgttc...1432..	gataaatataagatgccatt	GTTTTACCTGACTT	tcttcag	ggtatcct
P.Tro	atgtttca	ctccatgtgttc...1440..	gataaatataagatgccatt	GTTTTACCTGACTT	tcttcag	ggtatcct
P.Abe	atgtttca	ctccatgtgttc...1434..	gataaatataagatgccatt	GTTTTACCTGACTT	tcttcag	ggtatcct
C.Jac	atgtttca	ccccatgtgttc...1437..	gataaatataagatgccatt	GTTTTACCTGACTT	tcttcag	ggtatcct
M.Mus	ttatttca	ccccatgtgttt...1305..	gataaatataagatgccatt	GTTTTGCCTGACTT	tcttcag	ggtatcct
R.Nor	ttatttca	ccccatgtgttt...1350..	gataaatataagatgccatt	GTTTTGCCTGACTT	tcttcag	ggtatcct
C.Por	atgtttca	ctccatgtgttt...1377..	gataaatataagatgccatt	GTTTTACCTGACTT	tcttcag	ggtatcct
O.Cun	atgtttca	cccatgtgttc...1381..	gataaatataagatgccatt	GTTTTACCTGACTT	tcttcag	ggtatcct
C.Fam	atgtttca	ccccatgtgttc...1449..	gataaatataagatgccatt	GTTTTACCTGACTT	tcttcag	ggtatcct
B.Tau	atgtttca	ccccatgtgttc...1444..	gataaatataagatgccatt	GTTTTACCTGACTT	tcttcag	ggtatcct
E.Cab	atgtttca	ccccatgtgttt...1445..	gataaatataagatgccatt	GTTTTACCTGACTT	tcttcag	ggtatcct
L.Afr	atgtttca	ccccatgtgttt...1469..	gataaatataagatgccatt	GTTTTACCTGACTT	tcttcag	ggtatcct
	* **	* **	*****	*****	*****	*****

id=484695 gene=ENSG00000168137 name=SETD5 segment=chr3_9473561_9475053_1 type=IN

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R.Mac	aAGTGCAG	GTAAGAT	cctgttccatctaaatttaa...65..	ttgtaatgtag	atgattcc
P.Tro	aAGTGCAG	GTAAGAT	cctgttccatctaaatttaa...65..	ttgtaatgtag	atgattcc
P.Abe	aAGTGCAG	GTAAGAT	cctgttctatctaaatttaa...65..	ttgtaatgtag	atgattcc
C.Jac	aAGTGCAG	GTAAGAT	cctgttccatctaaatttaa...65..	ttgtaatgtag	atgattcc
M.Mus	aAGTGCAG	GTAAGAT	cctgtttcatctaaattcaa...65..	ttgtaatgtag	atgattcc
R.Nor	aAGTGCAG	GTAAGAT	cctgtttcatctaaattcaa...65..	ttgtaatgtag	atgattcc
C.Por	aAGTGCAG	GTAAGAT	cctgttccataaaacccaaa...65..	ttgtaatgtag	atgattcc
O.Cun	aAGTGCAG	GTAAGAT	cctgttccatctaaatccaa...65..	ttgtaatgtag	atgattcc
C.Fam	aAGTGCAG	GTAAGAT	catgctccatctcagttcaa...65..	ttgtaatgtag	atgattcc
B.Tau	aAGTGCAG	GTAAGAT	cgtgttccatctaaatccaa...65..	ttgtaatgtag	atgattcc
E.Cab	aAGTGCAG	GTAAGAT	catgttccatctaaatccaa...65..	ttgtaatgtag	atgattcc
L.Afr	aAGTGCAG	GTAAGAT	catgttccttctaaatccaa...65..	ttgtaatgtag	atgattcc
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id=484708 gene=ENSG00000168137 name=SETD5 segment=chr3_9476170_9476273_1 type=IN VIEW

Figure 539: CS=6.24



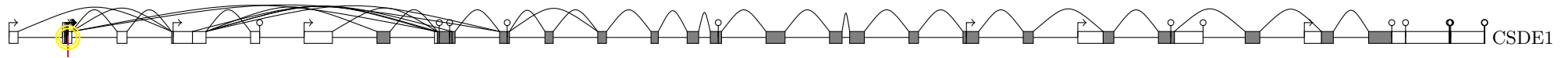
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R. Mac	gcc	gtgct	gcttatggcggcgctggagagggggcgct	GAGCTGTTgGG	GTGaGTAc
P. Tro	gcc	gtgct	gcttatggcggcgctggagagggggcgct	GAGCTGTTgGG	GTGaGTAc
P. Abe	gcc	gtgct	gcttatggcggcgctggagagggggcgct	GAGCTGTTgGG	GTGaGTAc
C. Jac	gcc	gtgct	gcttatggcggcgctggagagggggcgct	GAGCTGTTgGG	GTGagtag
M. Mus	gcc	gtgct	gcttatggcggcgctggagagggggcgct	GAGCTGTTgGG	GTGaGTAc
R. Nor	gcc	gtgct	gcttatggcggcgctggagagggggcgct	GAGCTGTTgGG	GTGaGTAc
C. Por	gcc	gtgct	gcttatggcggcgctggagagggggcgct	GAGCTGTTgGG	GTGaGTAc
C. Fam	gcc	gtgct	gcttatggcggcgctggagagggggcgct	GAGCTGTTgGG	GTGaGTAc
B. Tau	gcc	gtgct	gcttatggcggcgctggagagggggcgct	GAGCTGTTgGG	GTGaGTAc
E. Cab	gcc	gtgct	gcttatggcggcgctggagagggggcgct	GAGCTGTTgGG	GTGaGTAc
S. Sus	gcc	gtgct	gcttatggcggcgctggagagggggcgct	GAGCTGTTgGG	GTAAGTAc
O. Avi	gcc	gtgct	gcttatggcggcgctggagagggggcgct	GAGCTGTTgGG	GTGaGTAc
L. Afr	gcc	gtgct	gcttatggcggcgctggagagggggcgct	GAGCTGTTgGG	GTGaGTAc
	***	*****	*****	*****	** ****

id=459127 gene=ENSG0000009307 name=CSDE1 segment=chr1_115300546_115300585_-1 type=AN

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R. Mac	taacagaa	cagactttacca...99..	tgatctgaacaagaagttt	GTGCcTACTCAACAGTTT	tgaagagcacttcccaacg...36..	tgagattgcccg	gtacagca
P. Tro	taacagaa	cagactttacca...99..	tgatctgaacaagaagttt	GTGCcTACTCAACAGTTT	tgaagagcacttcccaacg...36..	tgagattgcccg	gtacagca
P. Abe	taacagaa	cagactttacca...99..	tgatctgaacaagaagttt	GTGCcTACTCAACAGTTT	tgaagagcacttcccaacg...36..	tgagattgcccg	gtacagca
C. Jac	taacagaa	cagactttacca...104..	----tgaacaagaagttt	gtgTGCcTACTCAACAGTTT	tgaagagcacttcccaacg...36..	tgagattgcccg	gtgcagca
M. Mus	taacagaa	cagactttacca...96..	tgatctgaacaagaagttt	GTGCcTACTCAACAGTTT	tgaagagcacttcccaacg...36..	tgagattgcccg	gtgcagca
R. Nor	taacggaa	cagactttacca...96..	tgatctgaacaagaagttt	GTGCcTACTCAACAGTTT	tgaagagcacttcccaacg...36..	tgagattgcccg	gtgcagca
C. Por	taacagaa	cagactttacca...99..	tgatctgaacaagaagttt	GTGCcTACTCAACAGTTT	tgaagagcacttcccaacg...36..	tgagattgcccg	gtgcagca
C. Fam	taacagaa	cagactttacca...96..	tgatctgaacaagaagttt	GTGCcTACTCAACAGTTT	tgaagagcacttcccaacg...36..	tgagattgcccg	gtgcagca
B. Tau	taacagaa	cagactttacca...99..	tgatctgaacaagaagttt	GTGCcTACTCAACAGTTT	tgaagagcacttcccaacg...36..	tgagattgcccg	gtgcagca
E. Cab	taacagaa	cagactttacca...99..	tgatctgaacaagaagttt	GTGCcTACTCAACAGTTT	tgaagagcacttcccaacg...36..	tgagattgcccg	gtgcagca
S. Sus	taacagaa	cagactttacca...99..	tgatctgaacaagaagttt	GTGCcTACTCAACAGTTT	tgaagagcacttcccaacg...36..	tgagattgcccg	gtgcagca
O. Avi	taacagaa	cagactttacca...95..	tgatctgaacaagaagttt	GTGCcTACTCAACAGTTT	tgaagagcacttcccaacg...35..	tgacattgcccg	gtgcagca
L. Afr	taacagaa	cagactttacca...99..	tgatctgaacaagaagttt	GTGCcTACTCAACAGTTT	tgaagagcacttcccaacg...36..	tgagattgcccg	gtgcagca
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id=459132 gene=ENSG0000009307 name=CSDE1 segment=chr1.115292595.115292811_-1 type=AN VIEW

Figure 540:



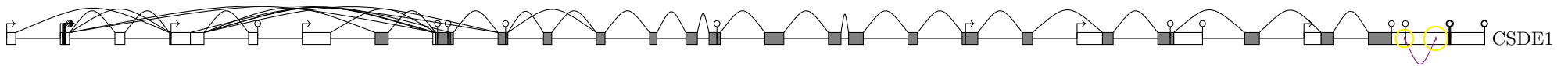
H.Sap	ttt	attc	cTACGtaCCGGg	cC	GTg
R.Mac	ttt	attc	cTACGtaCCGGg	cC	GTg
P.Tro	ttt	attc	cTACGtaCCGGg	cC	GTg
P.Abe	ttt	attc	cTACGtaCCGGg	cC	GTg
C.Jac	ttt	attc	cTACGtaCCGGg	cC	GTg
M.Mus	ttt	attc	cTACGtaCCGGg	cC	GTg
R.Nor	ttt	attc	cTACGtaCCGGg	cC	GTg
C.Por	ttt	attc	cTACGtaCCGGg	cC	GTg
C.Fam	ttt	attc	cTACGtaCCGGg	cC	GTg
B.Tau	ttt	attc	cTACGtaCCGGg	cC	GTg
E.Cab	ttt	attc	cTACGtaCCGGg	cC	GTg
S.Sus	ttt	attc	cTACGtaCCGGg	cC	GTg
O.Avi	ttt	attc	cTACGtaCCGGg	cC	GTg
L.Afr	ttt	attc	cTACGtaCCGGg	cC	GTg
*** **					

id=459124 gene=ENSG0000009307 name=CSDE1 segment=chr1.115300596_115300603_-1 type=AN

H.Sap	tACGtaCC	GGg	CGTGct	gct
R.Mac	tACGtaCC	GGg	CGTGct	gct
P.Tro	tACGtaCC	GGg	CGTGct	gct
P.Abe	tACGtaCC	GGg	CGTGct	gct
C.Jac	tACGtaCC	GGg	CGTGct	gct
M.Mus	tACGtaCC	GGg	CGTGct	gct
R.Nor	tACGtaCC	GGg	CGTGct	gct
C.Por	tACGtaCC	GGg	CGTGct	gct
C.Fam	tACGtaCC	GGg	CGTGct	gct
B.Tau	tACGtaCC	GGg	CGTGct	gct
E.Cab	tACGtaCC	GGg	CGTGct	gct
S.Sus	tACGtaCC	GGg	CGTGct	gct
O.Avi	tACGtaCC	GGg	CGTGct	gct
L.Afr	tACGtaCC	GGg	CGTGct	gct
***** **				

id=459125 gene=ENSG0000009307 name=CSDE1 segment=chr1.115300591_115300595_-1 type=AN VIEW

Figure 541:



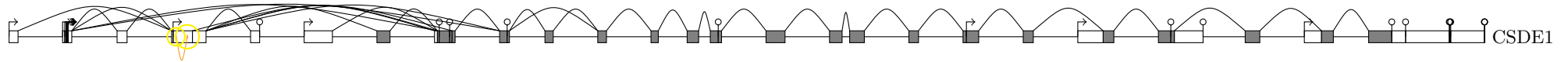
H. Sap	gcagcctg	gaaaaacttaag...98...gactgttat--cttgttggccc	TATGAAATTCTGCACT	----tttcattat	atactcta
R. Mac	gcagcctg	gaaaaacttaag...98...gactgttat--cttgttggccc	TATGAAATTCTGCACT	----tttcattat	atactcta
P. Tro	gcagcctg	gaaaaacttaag...98...gactgttat--cttgttggccc	TATGAAATTCTGCACT	----tttcattat	atactcta
P. Abe	gcagcctg	gaaaaacttaag...97...gactgttat--cttgttggccc	TATGAAATTCTGCACT	----tttcattat	atactcta
C. Jac	gcagcctg	gaaaaacttaag...99...--ctgttatcttcttggccc	TATGAAATTCTGCACT	tgataattcatttt	atattcta
M. Mus	gcagcctg	gaaaaacttaag...97...gactgttat--tttgttggccc	TATGAAATTCTGCACT	---ctagtcagtat	atactcta
R. Nor	gcagcctg	gaaaaacttaag...96...gactgttac--tttgttggccc	TATGAAATTCTGCACT	---ctagtcagtat	atatactc
C. Por	gcagcctg	gagaacttaag...96...--ctgttac--cttgttggccc	TGAAATTCTGCACTT	gatgatttagtat	atactcta
O. Cun	gcagcctg	gaaaaacttaag...95...gactgttat--cttgttggccc	TATGAAATTCTGCACT	tgATATTAGTGA	-tactcta
C. Fam	gcagcctg	gaaaaacttaag...96...gactgttat--cttgttggccc	TATGAAATTCTGCACT	tgGTATTAG	-cat
B. Tau	gcagcctg	gaaaaacttaag...97...gactgttaa--cttgttggccc	TATGAAATTCTGCACT	tgATATTAGT	-at
E. Cab	gcagcctg	gaaaaacttaag...97...gactgttat--cttgttggccc	TATGAAATTCTGCACT	tgATATTAGT	-at
L. Afr	gcagcctg	gaaaaacttaag...97...gactgttat--cttgttggccc	TGTGAAATTCTGCACT	tgATATTAGT	---gtcta
	*****	** * * * *	*****	** *****	*****

id=459187 gene=ENSG0000009307 name=CSDE1 segment=chr1_115260423_115260577_-1 type=EN

H. Sap	----ttcat--tat	atactctacctt...296...-----ttactacaattagtagtat	GGTGCAGAATTCATG	caaatgaggagtgccagcag...114...acaaaaaaaa	taaaaaag	
R. Mac	----ttcat--tat	atactctacctt...296...-----ttactacaattagtagtat	GGTGCAGAATTCATG	caaatgaggagtgccagcag...117...aaaaaaaa	taaaaaag	
P. Tro	----ttcat--tat	atactctacctt...296...-----ttactacaattagtagtat	GGTGCAGAATTCATG	caaatgaggagtgccagcag...120...acaaaaaaaa	taaaaaag	
P. Abe	----ttcat--tat	atactctacctt...296...-----ttactacaattagtagtat	GGTGCAGAATTCATG	caaatgaggagtgccagcag...113...acaaaaaaaa	taaaaaag	
C. Jac	----ttcat--ttt	atattctacctt...292...-----ttactacaataagtagtat	GGTGCAGAATTCATG	caaatgaggagtgccagcag...116...aaaaaaaa	taaaaaag	
M. Mus	----gtcag--tat	atactctacctt...285...-----ttactacaattagtagtat	GGTGCAGAATTCATG	caaatgaagtgtgccagcag...117...aaataataata	taaaaaag	
R. Nor	----gtcagtatat	atactctacc...282...-----ttactacaattagtagtat	GGTGCAGAATTCATG	caaatgaagtgtgccagcag...110...aaaaaaaaata	taaaaaag	
C. Por	----tttag--tat	atactctacctt...292...-----aactttacaattagtagtat	GGTGCAGAATTCATG	ggcaaatgaagtgtgccag--g...112...acaaaaaaaa	aaaaaag	
O. Cun	----tttag--tgt	atactctacctt...294...tgggggtaataactttac	TGCAATTAGTATGT	GGTGCAGAATTCATG	caaatgagggtgtgccagcag...114...agaaaaaaaa	taaaaaag
C. Fam	----tttag--cat	atactctacctt...293...-gggggg---taactttactaca	TTAGTATGT	GGTGCAGAATTCATG	caaatgagggtgtgccagcag...114...caaaaaaaaa	taaaaaag
B. Tau	----tttag--tat	atactctacctt...283...gggtggg---taactttactaca	ATTAGTATGT	GGTGCAGAATTCATG	caaatgagggtgtgccagcag...118...agaaaaaaaa	taaaaaag
E. Cab	----tttag--tat	atactctacctt...268...gggggg---taactttactaca	ATTAGTATGT	GGTGCAGAATTCATG	caaatgaggcgtgccagcag...112...aacaaaaaaaa	taaaaaag
L. Afr	tgatatttag--tg-	----tctacctt...285...tgggggg---taactttactaca	ATTAGTATGT	GGTGCAGAATTCATG	caaatgagggtgtgccagcag...113...aacaaaaaaaa	taaaaaag
	**	*****	* **** * * **	*****	***** * * * * *	

id=459188 gene=ENSG0000009307 name=CSDE1 segment=chr1_115259933_115260422_-1 type=E3 VIEW

Figure 542:



H.Sap	taacagaa	cagactttaccacctgaaac	TGCTgc	TTCAAGTT	cagatcaggcaaggaacaaa...151...tgagattgccc	gtacagca
R.Mac	taacagaa	cagactttaccacctgaaac	TGCTgc	TTCAAGTT	cagatcaggcaaggaacaaa...151...tgagattgccc	gtacagca
P.Tro	taacagaa	cagactttaccacctgaaac	TGCTgc	TTCAAGTT	cagatcaggcaaggaacaaa...151...tgagattgccc	gtacagca
P.Abe	taacagaa	cagactttaccacctgaaac	TGCTgc	TTCAAGTT	cagatcaggcaaggaacaaa...151...tgagattgccc	gtacagca
C.Jac	taacagaa	cagactttaccacctgaaac	TGCTgc	TTCAAGTT	cagatcaggcaaggaacaaa...151...tgagattgccc	gtgcagca
M.Mus	taacagaa	cagactttaccacctgaaac	TGCTgc	TTCAAGTT	cagatcaggcaaggaacaga...148...tgagattgccc	gtgcagca
R.Nor	taacgaa	cagactttaccacctgaaac	TGCTgc	TTCAAGTT	cagatcaggcaaggaacaga...148...tgagattgccc	gtgcagca
C.Por	taacagaa	cagactttaccacctgaaac	TGCTgc	TTCAAGTT	cagatcaggcaaggaacaaa...151...tgagattgccc	gtgcagca
C.Fam	taacagaa	cagactttaccacctgaaact	TGCTgc	TTCAAGTT	cagatcagacaaggaacaaa...147...tgagattgccc	gtgcagca
B.Tau	taacagaa	cagactttaccacctgaaac	TGCTgc	TTCAAGTT	cagatcaggcaaggaacaaa...151...tgagattgccc	gtgcagca
E.Cab	taacagaa	cagactttaccacctgaaac	TGCTgc	TTCAAGTT	cagatcaggcaaggaacaaa...151...tgagattgccc	gtgcagca
S.Sus	taacagaa	cagactttaccacctgaaac	TGCTgc	TTCAAGTT	cagatcaggcaaggaacaaa...151...tgagattgccc	gtgcagca
O.Avi	taacagaa	cagactttaccacctgaaac	TGCTgc	TTCAAGTT	cagatcaggcaacaaccta...146...tgacattgccc	gtgcagca
L.Afr	taacagaa	cagattttaccacctgaaac	TGCTgc	TTCAAGTT	cagatcaggcaaggaacaaa...151...tgagattgccc	gtgcagca
**** ** **** ***** **						

id=459132 gene=ENSG0000009307 name=CSDE1 segment=chr1.115292595.115292811.-1 type=AN

H.Sap	taacagaa	cagactttacca...112...gaagtttgcctactcaac	AGCTt	TGAAag	AGCA	cttcccaacgctgctagtag...26...tgagattgccc	gtacagca
R.Mac	taacagaa	cagactttacca...112...gaagtttgcctactcaac	AGCTt	TGAAag	AGCA	cttcccaacgctgctagtag...26...tgagattgccc	gtacagca
P.Tro	taacagaa	cagactttacca...112...gaagtttgcctactcaac	AGCTt	TGAAag	AGCA	cttcccaacgctgctagtag...26...tgagattgccc	gtacagca
P.Abe	taacagaa	cagactttacca...112...gaagtttgcctactcaac	AGCTt	TGAAag	AGCA	cttcccaacgctgctagtag...26...tgagattgccc	gtacagca
C.Jac	taacagaa	cagactttacca...112...gaagtttgcctactcaac	AGCTt	TGAAag	AGCA	cttcccaacgctgctagtag...26...tgagattgccc	gtgcagca
M.Mus	taacagaa	cagactttacca...109...gaagtttgcctactcaac	AGCTt	TGAAag	AGCA	cttcccaacgctgctagtag...26...tgagattgccc	gtgcagca
R.Nor	taacgaa	cagactttacca...109...gaagtttgcctactcaac	AGCTt	TGAAag	AGCA	cttcccaacgctgctagtag...26...tgagattgccc	gtgcagca
C.Por	taacagaa	cagactttacca...112...gaagtttgcctactcaac	AGCTt	TGAAag	AGCA	cttcccaacgctgctagtag...26...tgagattgccc	gtgcagca
C.Fam	taacagaa	cagactttacca...109...gaagtttgcctactcaac	AGCTt	TGAAag	AGCA	cttcccaacgctgctagtag...26...tgagattgccc	gtgcagca
B.Tau	taacagaa	cagactttacca...112...gaagtttgcctactcaac	AGCTt	TGAAag	AGCA	cttcccaacgctgctagtag...26...tgagattgccc	gtgcagca
E.Cab	taacagaa	cagactttacca...112...gaagtttgcctactcaac	AGCTt	TGAAag	AGCA	cttcccaacgctgctagtag...26...tgagattgccc	gtgcagca
S.Sus	taacagaa	cagactttacca...112...gaagtttgcctactcaac	AGCTt	TGAAag	AGCA	cttcccaacgctgctagtag...26...tgagattgccc	gtgcagca
O.Avi	taacagaa	cagactttacca...108...gaagtttgcctactcaac	AGCTt	TGAAag	AGCA	cttcccaacgctgctagtag...25...tgacattgccc	gtgcagca
L.Afr	taacagaa	cagattttacca...112...gaagtttgcctactcaac	AGCTt	TGAAag	AGCA	cttcccaacgctgctagtag...26...tgagattgccc	gtgcagca
**** ** **** ***** ** ** ** * ** ** ** ** ** ** ** ** ** ** ** * ** **							

id=459132 gene=ENSG0000009307 name=CSDE1 segment=chr1.115292595.115292811.-1 type=AN VIEW

Figure 543:



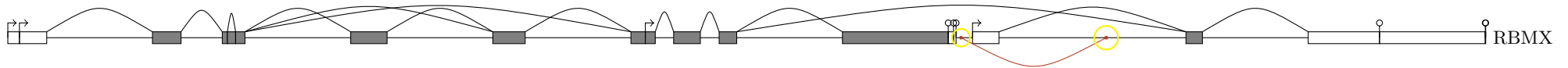
H. Sap	caaagatg	gtaagcaaagca...505...	gcagcatgaccagggtccag	CCATGAAGTTGAA	---aaagatgctcttgaatatag-----	...318...	taacttttgag	gttggtga
P. Abe	caaagatg	gtaagcaaagca...521...	gcagcatgaccagggtccag	CCATGAAGTTGAA	---aaagatgctcttgaatatag-----	...318...	taacttttgag	gttgatga
C. Jac	caaagatg	gtaagcaaagca...498...	gcagcatgaccagggtccag	CCATGAAGTTGAA	---aaagatgctcttgaatatag-----	...318...	taacttttgag	gttgagga
M. Mus	caaagatg	gtaagcaaagca...514...	gcagcatgaccagggtccag	CCATGAAGTTGAA	---aaagatgctcttgaatatag-----	...328...	caacttttgag	gttgaatc
R. Nor	caaagatg	gtaagcaaagca...496...	gcagcatgaccagggtccag	CCATGAAGTTGAA	aaCGATG---ctcttgaatatagtaaaactt...	...312...	taacttttgag	gttgaacc
C. Por	caaagatg	gtaagcaaagca...484...	gcagcatgaccagggtccag	CCATGAAGTTGAA	aaaaaagatcctcttgaata-----	...321...	taacttttgag	gttgagaa
O. Cun	caaagatg	gtaagcaaagca...515...	gcagcatgaccagggtccag	CCATGAAGTTGAA	---aaagatgctcttgaatatag-----	...319...	taacttttgag	gttgagga
C. Fam	caaagatg	gtaagcaaagca...500...	gcagcatgaccagggtccag	CCATGAAGTTGAA	---aaagatgctcttgaatatag-----	...313...	taacttttacag	gttgagga
B. Tau	caaagatg	gtaagcaaagca...493...	gcagcatgaccagggtccag	CCATGAAGTTGAA	---aaagatgctcttgaatatag-----	...315...	taacttttacag	gttgagaa
E. Cab	caaagatg	gtaagcaaagca...503...	gcagcatgaccagggtccag	CCATGAAGTTGAA	---aaagatgctcttgaatatag-----	...313...	taacttttacag	gttgagga
S. Sus	caaagatg	gtaagcaaagca...503...	gcagcatgaccagggtccag	CCATGAAGTTGAA	---aaagatgctcttgaatatag-----	...313...	taacttttacag	gttgagaa
L. Afr	caaagatg	gtaagcaaagca...500...	gcagcatgaccagggtccag	CCATGAAGTTGAA	---aaagatgctcttgaatatag-----	...309...	ctgttttacag	gttgagga
	*****	*****	*****	*****	* * *****		**** **	****

id=812773 gene=ENSG00000147274 name=RBMX segment=chrX_135954505_135955404_-1 type=IN

H. Sap	caaagatg	gtaagcaaagca...604...	-----cttcaataa-gttttgttcg	TTCAACTTATGG	atttaacgtggcagtgacc...	...220...	taacttttgag	gttggtga
P. Abe	caaagatg	gtaagcaaagca...620...	-----cttcaataa-gttttgttcg	TTCAACTTATGG	atttaacgtggcagtgacc...	...220...	taacttttgag	gttgatga
C. Jac	caaagatg	gtaagcaaagca...597...	-----cttcaataa-gttttgttcg	TTCAACTTATGG	atttaacgtggcagtgacc...	...220...	taacttttgag	gttgagga
M. Mus	caaagatg	gtaagcaaagca...611...	-----tccttcaaat---gttttgttcg	TTCAACTTATGG	atttaacgtggcagtgacc...	...232...	caacttttgag	gttgaatc
R. Nor	caaagatg	gtaagcaaagca...587...	acttattccttcaaat---gtttTGTCCg	TTCAACTTATGG	atttaacgtggcagtgacc...	...223...	taacttttgag	gttgaacc
C. Por	caaagatg	gtaagcaaagca...587...	-----ttcaataaaggtttgtccg	TTCAACTTATGG	atttaacgtggcagtgacc...	...219...	taacttttgag	gttgagaa
O. Cun	caaagatg	gtaagcaaagca...614...	-----cttcaataa-gttttgttcg	TTCAACTTATGG	atttaacgtggcagtgacc...	...221...	taacttttgag	gttgagga
C. Fam	caaagatg	gtaagcaaagca...598...	-----cttcaataa-gttttgttcg	TTCAACTTATGG	atttaacatggcagtgacc...	...216...	taacttttacag	gttgagga
B. Tau	caaagatg	gtaagcaaagca...593...	-----cttcaataa-gttttgttcg	TTCAACTTATGG	atttaacatggcagtgacc...	...216...	taacttttacag	gttgagaa
E. Cab	caaagatg	gtaagcaaagca...602...	-----cttcaataa-gttttgttcg	TTCAACTTATGG	atttaacatggcagtgacc...	...215...	taacttttacag	gttgagga
S. Sus	caaagatg	gtaagcaaagca...602...	-----cttcaataa-gttttgttcg	TTCAACTTATGG	atttaacatggcagtgacc...	...215...	taacttttacag	gttgagaa
L. Afr	caaagatg	gtaagcaaagca...600...	-----cttcaataa-gttttgttcg	TTCAACTTATGG	atttaacatggcagtgacc...	...210...	ctgttttacag	gttgagga
	*****	*****	*****	*****	*****		**** **	****

id=812773 gene=ENSG00000147274 name=RBMX segment=chrX_135954505_135955404_-1 type=IN VIEW

Figure 545:



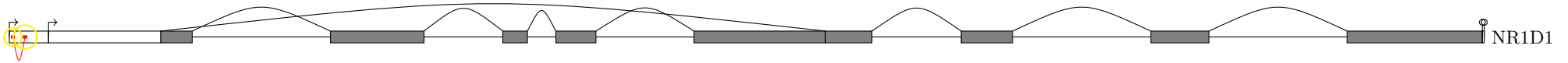
H. Sap	gaagctgc---	aaaggtgct	TGCTCTTA	ctGTTT	caaat	ttttgcaactctgtagt	gtctcacttttaaggaacagcttgattgcaaa	ggagaaaa
P. Abe	gaagctgc---	aaaggtgct	TGCTCTTA	ctGTTT	caaat	ttttgcaactctgtagt	gtctcacttttaaggaacagcttgattgcaaa	ggagaaaa
C. Jac	gaagctgc---	aaaggtgct	TGCTCTTA	ctGTTT	caaat	ttttgcaactctgtagt	gtctcacttttaaggaacagcttgattgcaaa	ggagaaaa
M. Mus	gaagctgc-aa	accgatgct	TGCTCTTA	ctGTTT	caaat	ttttgcaactctgtagt	gtctcacttttaaggaacagcttgattgcaaa	ggagaaaa
R. Nor	gaagctgcaaa	aacgatgct	TGCTCTTA	ctGTTT	caaat	ttttgcaactctgtagt	gtctcacttttaaggaacagcttgattgcaaa	ggagaaaa
C. Por	gaagctgc--a	aacgatgct	TGCTCTTA	ctGTTT	caaat	ttttgcaactctgtagt	gtctcacttttaaggaacagcttgattgcaaa	ggagaaat
O. Cun	gaagctgc--a	aacgatgct	TGCTCTTA	ctGTTT	caaat	ttttgcaactctgtagt	gtctcacttttaaggaacagcttgattgcaaa	ggagaaaa
C. Fam	gaagctgc--a	aacggctgt	TGCTCTTA	ctGTTT	caaat	ttttgcaactctgtagt	gtctcactttt-aaggaacagcttgattgcaaa	ggagaaaa
B. Tau	gaagctgc--a	aacgatgct	TGCTCTTA	ctGTTT	caaat	ttttgcaactctgtagt	gtctcactttt-aaggaacagcttgattgcaaa	ggagaaaa
E. Cab	gaagctgc--a	aacgatgct	TGCTCTTA	ctGTTT	caaat	ttttgcaactctgtagt	gtctcactttt-aaggaacagcttgattgcaaa	ggagaaaa
S. Sus	gaagctgc--a	aacgatgct	TGCTCTTA	ctGTTT	caaat	ttttgcaactctgtagt	gtctcactttt-aaggaacagcttgattgcaaa	ggagaaaa
L. Afr	gaagctgc--a	aacaatact	TGCTCTTA	ctGTTT	caaat	ttttgcaactctgtagt	gtctcacttttaaggaacagcttgattgcaaa	ggagaaaa
	*****	*	*	*	*	*	*	*****

id=812771 gene=ENSG0000147274 name=RBMX segment=chrX_135955530_135955607_-1 type=IN

H. Sap	caaagatg	gtaagcaaagca...476...	--caagtggctcttt-aaaaagca---	AAACc	TGAGgc	AGCA	tgacccaggtccagccatga...345...	taacttttcag	gttgtgta
P. Abe	caaagatg	gtaagcaaagca...492...	--caagtggctcttt-aaaaagca---	AAACc	TGAGgc	AGCA	tgacccaggtccagccatga...345...	taacttttcag	gttgatga
C. Jac	caaagatg	gtaagcaaagca...469...	--caagtggctcttt-aaaaagca---	AAACc	TGAGgc	AGCA	tgacccaggtccagccatga...345...	taacttttcag	gttgagga
M. Mus	caaagatg	gtaagcaaagca...485...	-----tggtcttttaaaaagcaaaa	AAACc	TGAGgc	AGCA	tgacccaggtccagccatga...355...	caat	tttttcag
R. Nor	caaagatg	gtaagcaaagca...467...	----agtggtcttttaaaaagcaaa-	AAACc	TGAGgc	AGCA	tgacccaggtccagccatga...346...	taat	tttttcag
C. Por	caaagatg	gtaagcaaagca...455...	--caagtggctcttt-aaaaagca---	AAACc	TGAGgc	AGCA	tgacccaggtccagccatga...348...	taat	tttttcag
O. Cun	caaagatg	gtaagcaaagca...486...	.tgcaagtggctcttt--aaagca---	AAACc	TGAGgc	AGCA	tgacccaggtccagccatga...346...	taat	tttttcag
C. Fam	caaagatg	gtaagcaaagca...471...	--caagtggctcttt-aaaaagca---	AAACc	TGAGgc	AGCA	tgacccaggtccagccatga...340...	taat	tttttacag
B. Tau	caaagatg	gtaagcaaagca...464...	--caagtggctcttt-aaaaagca---	AAACc	TGAGgc	AGCA	tgacccaggtccagccatga...342...	taat	tttttacag
E. Cab	caaagatg	gtaagcaaagca...474...	--caagtggctcttt-aaaaagca---	AAACc	TGAGgc	AGCA	tgacccaggtccagccatga...340...	taat	tttttacag
S. Sus	caaagatg	gtaagcaaagca...474...	--caagtggctcttt-aaaaagca---	AAACc	TGAGgc	AGCA	tgacccaggtccagccatga...340...	taat	tttttacag
L. Afr	caaagatg	gtaagcaaagca...471...	---aagtggctcttttaaaaagca---	AAACc	TGAGgc	AGCA	tgacccaggtccagccatga...336...	ctgt	tttttacag
	*****	*****	*****	*****	*****	*****	*****	***	***

id=812773 gene=ENSG0000147274 name=RBMX segment=chrX_135954505_135955404_-1 type=IN VIEW

Figure 546:



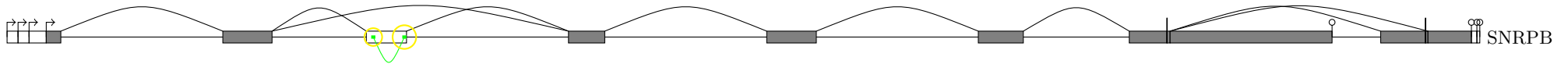
H. Sap	tgtca	CTG GGGCACGAGGCGCT	ccctgggatcacatggtacc...96...attggcagagtg	aaatatta
R. Mac	tgtca	CTG GGGCACGAGGCGCT	ccctgggatcacatggtacc...96...attggcagagtg	aaatatta
P. Tro	tgtca	CTG GGGCACGAGGCGCT	ccctgggatcacatggtacc...96...attggcagagtg	aaatatta
P. Abe	tgtca	CTG GGGCACGAGGCGCT	ccctgggatcacatggtacc...96...attggcagagtg	aaatatta
C. Jac	tgtca	CTG GGGCACGAGGCGCT	ccctaggatcacatggtacc...96...attggcagagtg	aaatatta
M. Mus	tgtca	CTG GGGCACGAGGCGCT	ccctggaatcacatggtacc...96...attggcagagtg	aaatatta
R. Nor	tgtca	CTG GGGCACGAGGCGCT	ccctggaatcacatggtacc...96...attggcagagtg	aaatatta
C. Por	tgtca	CTG GGGCACGAGGCGCT	ccctgggatcacatggtacc...96...attggcagagtg	aaatattg
O. Cun	tgtca	CTG GGGCACGAGGCGCT	ccctgggatcacatggtacc...96...attggcagagtg	aaatattg
C. Fam	tgtca	CTG GGGCACGAGGCGCT	ccctgggatcacatggtacc...98...attggcagagtg	aaatattg
F. Cat	tgtca	CTG GGGCACGAGGCGCT	ccctgggatcacatggtacc...98...attggcagagtg	aaatattg
B. Tau	tgtca	CTG GGGCACGAGGCGCT	ccctgggatcacatggtacc...98...attggcagagtg	aaatattg
E. Cab	tgtca	CTG GGGCACGAGGCGCT	ccctgggatcacatggtacc...98...attggcagagtg	aaatattg
L. Afr	tgtca	CTG GGGCACGAGGCGCT	ccctgggatcacatggtacc...98...attggcagagtg	aaatattg
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R. Mac	tgtcactg	gggcacgaggcgctccctgggatcacatggtac	ctgctcc AGTGCCCGTGCGCCCGG	gaaccctgggctgctggcgc...51...attggcagagtg	aaatatta
P. Tro	tgtcactg	gggcacgaggcgctccctgggatcacatggtac	ctgctcc AGTGCCCGTGCGCCCGG	gaaccctgggctgctggcgc...51...attggcagagtg	aaatatta
P. Abe	tgtcactg	gggcacgaggcgctccctgggatcacatggtac	ctgctcc AGTGCCCGTGCGCCCGG	gaaccctgggctgctggcgc...51...attggcagagtg	aaatatta
C. Jac	tgtcactg	gggcacgaggcgctccctaggatcacatggtac	ctgctcc AGTGCCCGTGCGCCCGG	gaaccctgggctgctggcgc...51...attggcagagtg	aaatatta
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C. Fam	tgtcactg	gggcacgaggcgctccctgggatcacatggtac	ctgctcc AGTGCCCGTGCGCCCGG	gaaccctgggttctggcgc...53...attggcagagtg	aaatattg
F. Cat	tgtcactg	gggcacgaggcgctccctgggatcacatggtac	ctgctcc AGTGCCCGTGCGCCCGG	gaaccctgggttctggcgc...53...attggcagagtg	aaatattg
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E. Cab	tgtcactg	gggcacgaggcgctccctgggatcacatggtac	ctgctcc AGTGCCCGTGCGCCCGG	gaaccctgggttctggcgc...53...attggcagagtg	aaatattg
L. Afr	tgtcactg	gggcacgaggcgctccctgggatcacatggtac	ctgctcc AGTGCCCGTGCGCCCGG	gaaccctaggctgctggcgc...53...attggcagagtg	aaatattg
		*****	***** * *****	*****	*****

id=452987 gene=ENSG00000126368 name=NR1D1 segment=chr17_38256837_38256978_-1 type=E5 VIEW

Figure 547:



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P.Tro  cccacag  gtgtgtGAGGGgGGAGaGCTTgagt-ttctggcctcattgcc...71...accctcttcagg  gtaagtgc
P.Abe  cccacag  gtgtgtGAGGGgGGAGaGCTTgagt-ttctggcctcattgcc...71...accctcttcagg  gtaagtgc
C.Jac  cccacag  gtgtgtGAGGGgGGAGaGCTTgagt-ttctggcctcattgcc...71...accctcttcagg  gtaagtgc
M.Mus  cccacag  gtgtgtGAGGGgGGAGaGCTTgatt-ttctggcctcattacc...71...accctcttcagg  gtaagtgc
R.Nor  cccacag  gtgt--GAGGGgGGAGaGCTTgatt-ttctggcctcattacc...71...accctcttcagg  gtaagtgc
C.Por  cccacag  gtgt--GAGGGgGGAGaGCTTgatttttctggccttcattac...72...accctcttcagg  gtaagtgc
O.Cun  cccacag  gtgtgtaAGGGgGGAGaGCTTggtt-ttctggcctcattgcc...70...accctcttcagg  gtaagtgc
C.Fam  cccacag  gtgtgtaAGGGgGGAGaGCTTgatt-ttctggcctcattgcc...71...accctcttcagg  gtaagtgc
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E.Cab  cccacag  gtgtgtaAGGGgGGAGaGCTTgatt-ttctggcctcattgcc...71...accctcttcagg  gtaagtgc
S.Sus  cccacag  gtgtgtaAGGGgGGAGaGCTTgatt-ttctggcctcattgcc...71...accctcttcagg  gtaagtgc
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id=452357 gene=ENSG00000125835 name=SNRPB segment=chr20_2447838_2447961_-1 type=AN

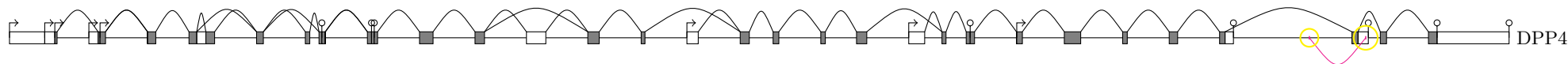
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R.Mac  cccacag  gtgtgtgagggg...71...tggtctgaaactgctttaagAAGCCTCTgaCCCTCttcagg  gtaagtgc
P.Tro  cccacag  gtgtgtgagggg...71...tggtctgaaactgctttaagAAGCCTCTgaCCCTCttcagg  gtaagtgc
P.Abe  cccacag  gtgtgtgagggg...71...tggtctgaaactgctttaagAAGCCTCTgaCCCTCttcagg  gtaagtgc
C.Jac  cccacag  gtgtgtgagggg...71...tggtctgaaactgctttaagAAGCCTCTgaCCCTCttcagg  gtaagtgc
M.Mus  cccacag  gtgtgtgagggg...71...tggtctgaaactgctttaagAAGCCTCTgaCCCTCttcagg  gtaagtgc
R.Nor  cccacag  gtgtgagggggg...69...tggtctgaaactgctttaagAAGCCTCTgaCCCTCttcagg  gtaagtgc
C.Por  cccacag  gtgtgagggggg...70...tggtctgaaactgctttaagAAGCCTCTgaCCCTCttcagg  gtaagtgc
O.Cun  cccacag  gtgtgtaagggg...70...tggtctgaaactgctttaagAAGCCTCTgaCCCTCttcagg  gtaagtgc
C.Fam  cccacag  gtgtgtaagggg...71...tggtctgaaactgctttaagAAGCCTCTgaCCCTCttcagg  gtaagtgc
B.Tau  cccacag  gtgtgtaagggg...71...tggtctgaaactgctttaagAAGCCTCTgaCCCTCttcagg  gtaagtgc
E.Cab  cccacag  gtgtgtaagggg...71...tggtctgaaactgctttaagAAGCCTCTgaCCCTCttcagg  gtaagtgc
S.Sus  cccacag  gtgtgtaagggg...71...tggtctgaaactgctttaagAAGCCTCTgaCCCTCttcagg  gtaagtgc
L.Afr  cccacag  gtgtgtaagggg...71...tggtctgaaactgctttaagAAGCCTCTgaCCCTCttcagg  gtaagtgc
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id=452357 gene=ENSG00000125835 name=SNRPB segment=chr20_2447838_2447961_-1 type=AN VIEW

Figure 548:



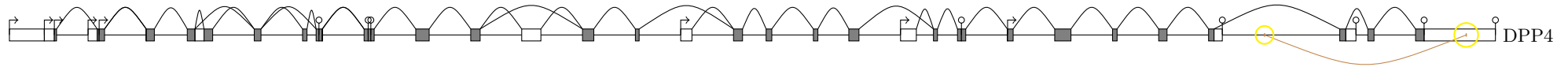
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R. Mac	ttatttcc	aacaaaattcct...4926...gtttatggcagatccttttt	TGAATaaTGACATCTTtTCCC	aattccag	aattcaac
P. Tro	ttatttcc	aacaaaattcct...4926...gtttatggcagatccttttt	TGAATaaTGACATCTTtTCCC	aattccag	aattcaac
P. Abe	ttatttcc	aacaaaattcct...4926...gtttatggcagatccttttt	TGAATaaTGACATCTTtTCCC	aattccag	aattcaac
C. Jac	ttatttcc	aacaaaattcct...4926...gtttatggcagatccttttt	TGAATaaTGACATCTTtTCCC	aattccag	aattcaac
M. Mus	atatttcc	aacaaaattcct...4926...agttagggcagatccttttt	TGAATaaTGACATCTTtTCCC	aattccag	aactcaac
C. Por	gtatttcc	aataaaatcctt...4926...gtttatggcagatccttttt	TGAATaaTGACATCTTtTCCC	aattccag	aattcaac
O. Cun	tgatttcc	aacaaaattcct...4926...gtttatggcagatccttttt	TGAATaaTGACATCTTtTCCC	aattccag	aattcaac
C. Fam	ttatttcc	aacaaaattcct...4926...gtttatggcagatccttttt	TGAATaaTGACATCTTtTCCC	aattccag	aattcaac
B. Tau	ttatttcc	aacaaaattcct...4926...gtttatggcagatccttttt	TGAATaaTGACATCTTtTCCC	aattccag	aattcaac
E. Cab	ttatttcc	aacaaaattcct...4926...gtttatggcagatccttttt	TGAATaaTGACATCTTtTCCC	aattccag	aattcaac
S. Sus	ttatttcc	aacagaattcct...4926...gtttatggcagatccttttt	TGAATaaTGACATCTTtTCCC	aattccag	aattcaac
O. Avi	ttatttcc	aacaaaattcct...4926...gtttatggcagatccttttt	TGAATaaTGACATCTTtTCCC	aattccag	aattcaac
L. Afr	ttatttcc	aacaaaattcct...4926...gtttatggcagatccttttt	TGAATaaTGACATCTTtTCCC	aattccag	aattcaac
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id=486359 gene=ENSG00000197635 name=DPP4 segment=chr2_162851883_162862154_-1 type=IN

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R. Mac	agcagatg	gtgagtttcagt...44...ctgacaaaacaaaagcatga	GGGGcAAGAcTGTTAcATTAc	cttcaataaaaacagtgttgctttcc	acaagtca
P. Tro	agcagatg	gtgagtttcagt...44...ctgacaaaacaaaagcatga	GGGGcAAGAcTGTTAcATTAc	cttcaataaaaacagtgttgctttcc	acaagtca
P. Abe	agcagatg	gtgagtttcagt...44...ctgacaaaacaaaagcatga	GGGGcAAGAcTGTTAcATTAc	cttcaataaaaacagtgttgctttcc	acaagtca
C. Jac	agcagatg	gtgagtttcagt...44...ctgacaaaacaaaagcatga	GGGGcAAGAcTGTTAcATTAc	cttcaataaaaacagtgttgctttcc	acaagtca
M. Mus	ggcagatg	gtgagtttcagt...44...ctgacaaaacaaaagcatga	GGGGcAAGAcTGTTAcATTAc	cttcaataaaaacagtgttgctttcc	acaactca
C. Por	agcagatg	gtgagtttcagt...44...ctgacaaaacaaaagcatga	GGGGcAAGAcTGTTAcATTAc	cttcaataaaaacagtgttgctttcc	acaactca
O. Cun	agcagatg	gtgagtttcagt...44...ctgacaaaacaaaagcatga	GGGGcAAGAcTGTTAcATTAc	cttcaataaaaacagtgttgctttcc	acaactca
C. Fam	agcagatg	gtgagtttcagt...44...ctgacaaaacaaaagcatga	GGGGcAAGAcTGTTAcATTAc	cttcaataaaaacagtgttgctttcc	acaactca
B. Tau	agcagatg	gtgagtttcagt...44...ctgacaaaacaaaagcatga	GGGGcAAGAcTGTTAcATTAc	cttcaataaaaacagtgttgctttcc	acaactca
E. Cab	agcagatg	gtgagtttcagt...44...ctgacaaaacaaaagcatga	GGGGcAAGAcTGTTAcATTAc	cttcaataaaaacagtgttgctttcc	acaactca
S. Sus	agcagatg	gtgagtttcagt...44...ctgacaaaacaaaagcatga	GGGGcAAGAcTGTTAcATTAc	cttcaataaaaacagtgttgctttcc	acaactca
O. Avi	agcagatg	gtgagtttcagt...44...ctgacaaaacaaaagcatga	GGGGcAAGAcTGTTAcATTAc	cttcaataaaaacagtgttgctttcc	acaactca
L. Afr	agcagatg	gtgagtttcagt...44...ctgacaaaacaaaagcatga	GGGGcAAGAcTGTTAcATTAc	cttcaataaaaacagtgttgctttcc	ataactca
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Figure 550:



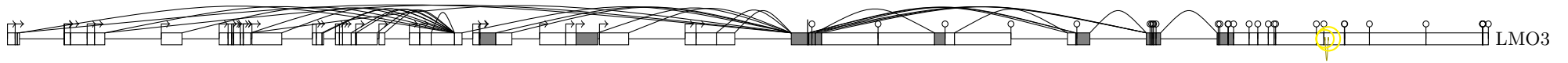
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R.Mac	ttatttcc	aacaaaattcct...4533...tatgtacaggctctttgaaa	TGTAGCATg	TATGGca	CCATGt	tgacacatggttgccatggc...371...tccaattccag	aattcaac
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C.Por	gtatttcc	aataaaatcctt...4532...tatgtacaggctctttgaaa	TGTAGCATg	TATGGca	CCATGt	tgacacatggttgccatggc...372...tccaattccag	aattcaac
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id=486359 gene=ENSG00000197635 name=DPP4 segment=chr2_162851883_162862154_-1 type=IN

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R.Mac	taccttag	cacctcaaaca...640...gcaggccccaggtgccagt	TATGGCTATg	GTGCTACA	aaaacacagcaagggtgatg...317...---tttcagaagtaa	tgacttgt	
P.Tro	taccttag	cacctcaaaca...643...gcaggccccaggtgccagt	TATGGCTATg	GTGCTACA	aaaacacagcaagggtgatg...315...---tttcagaagtaa	tgacttgt	
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C.Jac	tgcttag	cacttcaaaca...628...gcaggccccaggtgccagt	TATGGCTATg	GTGCTACA	aaaacacagcaagggtgatg...319...---tttcagaagtaa	tgagtgt	
M.Mus	tacactag	caacgatagct...617...taaggccccaggtgccagt	TATGGCTATg	GTGCTACA	aaaacacagcaagggtgatg...291...---tttcagaggtaa	tgggttat	
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Figure 551:



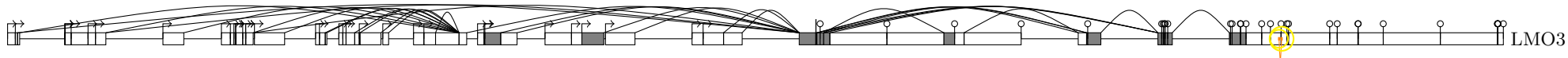
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R.Mac	aactAGTG	CCTTTGGG	tatcatgtaaaatTTTTcc...138...--	acactgaaaaga	tttgagtg
P.Tro	aactAGTG	CCTTTGGG	tatcacgtaaaatTTTTcc...141...--	acactgaaaaga	tttgagtg
P.Abe	aactAGTG	CCTTTGGG	tatcatgtaaaatTTTTcc...147...--	acactgaaaaga	tttgagtg
C.Jac	aactAGTG	CCTTTGGG	tatcatgtaaaatTTTTcc...138...--	gactgaaaaga	tttgagtg
C.Por	aactAGTG	CCTTTGGG	tatcatataaaatTTTTcca...135...--	gactgaaaaga	tctgagtg
O.Cun	aactAGTG	CCTTTGGG	tatcatgtaaaatTTTTcca...130...tggcactg--	aaga	tttgagtg
C.Fam	aactAGTG	CCTTTGGG	tatcatgtaaaatTTTTcca...132...--	gactgaaagga	tttgagtg
B.Tau	aactAGTG	CCTTTGGG	tatcatttaaaatTTTTcca...132...--	gactaaaaggt	tttgagtg
E.Cab	aactAGTG	CCTTTGGG	tatcatttaaaatTTTTcca...136...--	gactaaaagga	tttgagtg
S.Sus	aactAGTG	CCTTTGGG	tatcatttaagaatTTTTcca...133...--	gactaaaaggt	tttgagtg
O.Avi	aactAGTG	CCTTTGGG	tatcatttaaaatTTTTcaa...131...--	gactaaaaggt	tttgagtg
L.Afr	aactAGTG	CCTTTGGG	tattgtgtgaaatTTTTcca...132...--	gactaaaaga	tttaagtg
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id=120277 gene=ENSG0000048540 name=LMO3 segment=chr12_16703136_16703316_-1 type=E3

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R.Mac	aactagtgcctttgggtatcatgtaaaatTTTTCCAAAGGgtTACT	----ttaaaatctgttaccacaa...107...--	acactgaaaaga	tttgagtg
P.Tro	aactagtgcctttgggtatcacgtaaaatTTTTCCAAAGGgtTACT	----ttaaaatctgttaccacaa...110...--	acactgaaaaga	tttgagtg
P.Abe	aactagtgcctttgggtatcatgtaaaatTTTTCCAAAGGgtTACT	ttacttttaaaatctgttac-----...116...--	acactgaaaaga	tttgagtg
C.Jac	aactagtgcctttgggtatcatgtaaaatTTTTCCAAAGGgtTACT	----ttgcaaatctgttaccacaa...107...--	gactgaaaaga	tttgagtg
C.Por	aactagtgcctttgggtatcatataaaatTTTTCCAAAGGgtTACT	----ttaaaa-agtgttaccacaa...105...--	gactgaaaaga	tctgagtg
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C.Fam	aactagtgcctttgggtatcatgtaaaatTTTTCCAAAGGgtTACT	----ttagacaaatgttaccacaa...102...--	gactgaaagga	tttgagtg
B.Tau	aactagtgcctttgggtatcatttaaaatTTTTCCAAAGGgtTACT	----tttaaaaagtgttactgcaa...102...--	gactaaaaggt	tttgagtg
E.Cab	aactagtgcctttgggtatcatttaaaatTTTTCCAAAGGgtTACT	----ttaaaaagtgttaccacaa...106...--	gactaaaagga	tttgagtg
S.Sus	aactagtgcctttgggtatcatttaagaatTTTTCCAAAGGgtTACT	----ttaaaaagtgttactgcaa...103...--	gactaaaaggt	tttgagtg
O.Avi	aactagtgcctttgggtatcatttaaaatTTTTCCAAAGGgtTACT	----ttaaaaagtgttactgcaa...102...--	gactaaaaggt	tttgagtg
L.Afr	aactagtgcctttgggtattgtgtgaaatTTTTCCAAAGGgtTACT	----ttaaagaactgttaccacaa...102...--	gactaaaaga	tttaagtg
	*****	*****	* * * **	**** * *

id=120277 gene=ENSG0000048540 name=LMO3 segment=chr12_16703136_16703316_-1 type=E3 VIEW

Figure 552: CS=12.48



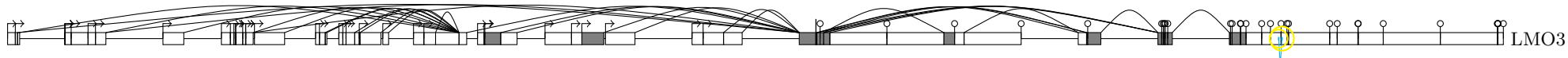
H.Sap	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
R.Mac	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
P.Tro	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
P.Abe	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
C.Jac	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
M.Mus	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
R.Nor	tttct	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
C.Por	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
O.Cun	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
C.Fam	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
B.Tau	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
E.Cab	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
S.Sus	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
O.Avi	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
L.Afr	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
	*** **	*****	*****	*****

id=120272 gene=ENSG0000048540 name=LM03 segment=chr12_16703809_16703901_-1 type=E3

H.Sap	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
R.Mac	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
P.Tro	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
P.Abe	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
C.Jac	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
M.Mus	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
R.Nor	tttct	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
C.Por	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
O.Cun	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
C.Fam	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
B.Tau	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
E.Cab	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
S.Sus	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
O.Avi	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
L.Afr	ttttt	gcacaaatgtaatacagttt	atttgtgttac	ttgtgttc
	*** **	*****	*****	*****

id=120272 gene=ENSG0000048540 name=LM03 segment=chr12_16703809_16703901_-1 type=E3 VIEW

Figure 553:



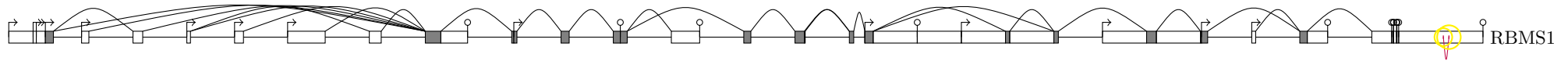
H. Sap	ttttt	tg	tcacttggcatgagatg	tttattttggactattg	tataaatgtattg	aatatttga	AGCACAAATGTAAT	acagttttattgtgtt	accat	ttgtgttc
R. Mac	ttttt	tg	tcacttggcatgagatg	tttattttggactattg	tataaatgtattg	aatatttga	AGCACAAATGTAAT	acagttttattgtgtt	accat	ttgtgttc
P. Tro	ttttt	tg	tcacttggcatgagatg	tttattttggactattg	tataaatgtattg	aatatttga	AGCACAAATGTAAT	acagttttattgtgtt	accat	ttgtgttc
P. Abe	ttttt	tg	tcacttggcatgagatg	tttattttggactattg	tataaatgtattg	aatatttga	AGCACAAATGTAAT	acagttttattgtgtt	accat	ttgtgttc
C. Jac	ttttt	tg	tcacttggcatgagatg	tttattttggactattg	tataaatgtattg	aatatttga	AGCACAAATGTAAT	acagttttattgtgtt	accat	ttgtgttc
M. Mus	ttttt	tg	tcacttggcatgagatg	tttattttggactattg	tataaatgtattg	aatatttga	AGCACAAATGTAAT	acagttttattgtgtt	accat	ttgtgttc
R. Nor	tttct	gtg	tcacttggcatgagatg	tttattttggactattg	tataaacgtattg	atatttga	AGCACAAATGTAAT	acagttttattgtgtt	accat	ttgtgttc
C. Por	ttttt	tg	tcacttggcatgagatg	tttattttggactattg	tataaatgtattg	aatatttga	AGCACAAATGTAAT	acagttttattgtgtt	accat	ttgtgttc
O. Cun	ttttt	tg	tcacttggcatgagatg	tttattttggactattg	tataaatgtattg	aatatttga	AGCACAAATGTAAT	acagttttattgtgtt	accat	ttgtgttc
C. Fam	ttttt	tg	tcacttggcatgagatg	tttattttggactattg	tataaatgtattg	aatatttga	AGCACAAATGTAAT	acagttttattgtgtt	accat	ttgtgttc
B. Tau	ttttt	tg	tcacttggcatgagatg	tttattttggactattg	tataaatgtattg	aatatttga	AGCACAAATGTAAT	acagttttattgtgtt	accat	ttgtgttc
E. Cab	ttttt	tg	tcacttggcatgagatg	tttattttggactattg	tataaatgtattg	aatatttga	AGCACAAATGTAAT	acagttttattgtgtt	accat	ttgtgttc
S. Sus	ttttt	tg	tcacttggcatgagatg	tttattttggactattg	tataaatgtattg	aatatttga	AGCACAAATGTAAT	acagttttattgtgtt	accat	ttgtgttc
O. Avi	ttttt	tg	tcacttggcatgagatg	tttattttggactattg	tataaatgtattg	aatatttga	AGCACAAATGTAAT	acagttttattgtgtt	accat	ttgtgttc
L. Afr	ttttt	tg	tcacttggcatgagatg	tttattttggactattg	tataaatgtattg	aatatttga	AGCACAAATGTAAT	acagttttattgtgtt	accat	ttgtgttc
	***	***	****	*****	*****	*****	*****	*****	*****	*****

id=120272 gene=ENSG0000048540 name=LM03 segment=chr12_16703809_16703901_-1 type=E3

H. Sap	gTTACcAT	TTGTGTT	ccatttgc	tctttgtattg	tgtgcatttagtacaatcagtg	ttt	aaacttac	
R. Mac	gTTACcAT	TTGTGTT	ccgtttgc	tctttgtattg	tgtgcatttagtacaatcagtg	ttt	aaacttac	
P. Tro	gTTACcAT	TTGTGTT	ccgtttgc	tctttgtattg	tgtgcatttagtacaatcagtg	ttt	aaacttac	
P. Abe	gTTACcAT	TTGTGTT	ccgtttgc	tctttgtattg	tgtgcatttagtacaatcagtg	ttt	aaacttac	
C. Jac	gTTACcAT	TTGTGTT	ccgtttgc	tctttgtattg	tgtgcatttagtacaatcagtg	ttt	aaacttac	
M. Mus	gTTACcAT	TTGTGTTGGTTTGGC	ttc	tttgtattg	tgtgcatttagtacaatcagtg	ttt	caacttac	
R. Nor	gTTACcAT	TTGTGTTGGTTTGGC	ttc	tttgtaattg	tgtgcatttggtagtacaatcagtg	tct	aaacttac	
C. Por	gTTACcAT	TTGTGTT	ctg	tttgc	tctttgtattg	tgtgcatttagtacaatcagtg	ttt	aaaattac
O. Cun	gTTACcAT	TTGTGTT	ctg	tttgc	tctttgtattg	tgtgcatttagtacaatcagtg	ttt	aaacttac
C. Fam	gTTACcAT	TTGTGTT	ctg	tttgc	tctttgtattg	tgtgcatttagtacaatcagtg	ttt	aaacttac
B. Tau	gTTACcAT	TTGTGTT	ctg	tttgc	tctttgtattg	tgtgcatttagtacaatcagtg	ttt	aaacttac
E. Cab	gTTACcAT	TTGTGTT	ctg	tttgc	tctttgtattg	tgtgcatttagtacaatcagtg	ttt	aaacttac
S. Sus	gTTACcAT	TTGTGTT	ctg	tttgc	tctttgtattg	tgtgcatttagtacaatcagtg	ttt	aaacttac
O. Avi	gTTACcAT	TTGTGTT	ctg	tttgc	tctttgtattg	tgtgcatttagtacaatcagtg	ttt	aaacttac
L. Afr	gTTACcAT	TTGTGTTTGG	ttt	g	tctttgtattg	tgtgcatttagtacaatcagtg	ttt	aaacttac
	****	**	*****	*****	*****	*****	*****	

id=120273 gene=ENSG0000048540 name=LM03 segment=chr12_16703758_16703808_-1 type=E3 VIEW

Figure 554:



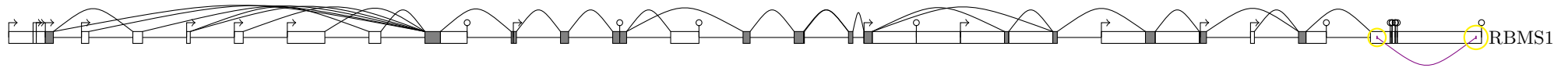
H. Sap	aaaaaaaa	gaaaagaaaact...1813...tctcactacttgatattttt--GCATTAGTTaAGACA	gaaattgatagctcggta...417...tctgaaatttta	tttt-tcct
R. Mac	aagaaaaa	aaaagaaaact...1816...tctcactacttgatattttt--GCATTAGTTaAGACA	gaaattgatagctcggta...414...tctgaaatttta	tttt-tcct
P. Tro	aaaaaaaa	gaaaagaaaact...1810...tctcactacttgatattttt--GCATTAGTTaAGACA	gaaattgatagctcggta...414...tctgaaatttta	tttt-tcct
P. Abe	aaaagaaa	gaaaagaaaact...1810...tctcactacttgatattttt--GCATTAGTTaAGACA	gaaattgatagctcggta...412...tctgaaatttta	tttt-tcct
C. Jac	aaaaaaaa	gaaaagaaaact...1803...tctcactacttgatattttt--GCATTAGTTaAGACA	gaaattgatagctcggta...421...tctgaaatttta	tttt-tcct
M. Mus	aaaaaaga	gaaaagaaaac...1970...---cactacttgatattttttcCATTAGTTaAGACA	gaaattgatagctcagtc...416...tctgaaactttc	ttct-tcct
R. Nor	aaaaaaaa	gagagaaaaaga...2257...--tctcactacttgatattttttcCATTAGTTaAGACA	gaaattgatagctcagtc...416...tctgaaactttc	ttct-tcct
C. Por	gaaaaaga	aaaaagaaact...1869...tctcactacttgatattttt--GCATTAGTTaAGACA	gaaattgatagctcagttg...427...tctgaaacttta	cttt-tcct
O. Cun	agaaaaaa	agaaaaaagaac...1888...tctcactacttgatattttt--GCATTAGTTaAGACA	gaaattgatagctgagtt...415...tctgaaatttta	ttct-tcct
C. Fam	aagaaaag	aaaagaaaact...1803...tctcactacttgatattttt--GCATTAGTTaAGACA	gaaattgatagctcggta...420...tctgaaatttta	tttt-tcct
B. Tau	gaaaaaaa	aaaagaaaact...1790...tctcactacttgatattttt--GCATTAGTTaAGACA	gaaattgatagctcagtt...426...-ctgaaatttta	tttttcct
E. Cab	aaaaaaaa	gaaaagaaaact...1807...tctcactacttgatattttt--GCATTAGTTaAGACA	gaaattgatagctcggta...417...tctgaaatttta	tttt-tccc
S. Sus	aaaaaaga	aaagaaaaaact...1834...tctcactacttgatattttt--GCATTAGTTaAGACA	gaaattgatagctcaggg...436...tctgaaatttta	tttt-tcct
O. Avi	aaaaaaaa	gaaaagaaaact...1786...tctcactacttgatattttt--GCATTAGTTaAGACA	gaaattgatagctcagtt...423...tctgaaatttta	tttt-tcct
	* *	* * ***** ** * **	***** **	* * **

id=689671 gene=ENSG00000153250 name=RBMS1 segment=chr2.161128662.161130970.-1 type=EN

H. Sap	aaaaaaaa	gaaaagaaaact...1876...---gggaaatctgctgctagaaaTGCTGAACTaAGTGC	catactcgtctgggtaagat...353...tctgaaatttta	tttt-tcct
R. Mac	aagaaaaa	aaaagaaaact...1879...---gggaaatctgctgctagaaaTGCTGAACTaAGTGC	catactcgtctgggtaagat...350...tctgaaatttta	tttt-tcct
P. Tro	aaaaaaaa	gaaaagaaaact...1873...---gggaaatctgctgctagaaaTGCTGAACTaAGTGC	catactcgtctgggtaagat...350...tctgaaatttta	tttt-tcct
P. Abe	aaaagaaa	gaaaagaaaact...1873...---gggaaatctgctgctagaaaTGCTGAACTaAGTGC	catactcgtctgggtaagat...348...tctgaaatttta	tttt-tcct
C. Jac	aaaaaaaa	gaaaagaaaact...1866...---gggaaatctgctgctagaaaTGCTGAACTaAGTGC	catactcgtctgggtaagat...357...tctgaaatttta	tttt-tcct
M. Mus	aaaaaaga	gaaaagaaaac...2033...---gggagatctgctgctagtaTGCTGAACTaAGTGC	catactcgtctgggtcaga...352...tctgaaactttc	ttct-tcct
R. Nor	aaaaaaaa	gagagaaaaaga...2317...gagggagatctgctgctag---GTCTGAACTaAGTGC	catactcgtctgggtcaga...355...tctgaaactttc	ttct-tcct
C. Por	gaaaaaga	aaaagaaagact...1931...---gggaaatctgctgctagaaaTGCTGAACTaAGTGC	catactcgtctgggtaagat...364...tctgaaacttta	cttt-tcct
O. Cun	agaaaaaa	agaaaaaagaac...1952...---ggatacctgctgctagaaatcGTCTGAACTaAGTGC	catactcgtctgggtaagat...350...tctgaaatttta	ttct-tcct
C. Fam	aagaaaag	aaaagaaaact...1866...---gggaaatctgctgctagataTGCTGAACTaAGTGC	catactcgtctgggtaagat...356...tctgaaatttta	tttt-tcct
B. Tau	gaaaaaaa	aaaagaaaact...1853...---gggaaatctgctgctagaaaTGCTGAACTaAGTGC	catacttctgctgggtaagat...362...-ctgaaatttta	tttttcct
E. Cab	aaaaaaaa	gaaaagaaaact...1869...---gggatgtctgctgctagaaaTGCTGAACTaAGTGC	catactcgtctgggtaagat...354...tctgaaatttta	tttt-tccc
S. Sus	aaaaaaga	aaagaaaaaact...1892...---gagaaatctgctgctagaaaTGCTGAACTaAGTGC	catactcgtctgggtaagat...377...tctgaaatttta	tttt-tcct
O. Avi	aaaaaaaa	gaaaagaaaact...1849...---gggaaatctgctgctagaaaTGCTGAACTaAGTGC	catactcgtctgggtaagat...359...tctgaaatttta	tttt-tcct
	* *	* * * ***** ***** **	***** **	* * **

id=689671 gene=ENSG00000153250 name=RBMS1 segment=chr2.161128662.161130970.-1 type=EN VIEW

Figure 555:



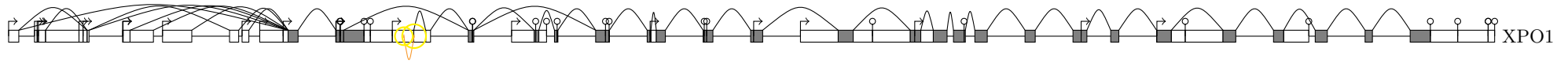
H. Sap	tcttcag	atgtacagaag...28...gctgaacaatcatggat	TCTGATCAA	TGTGCTTTA	GAAAT	tattgacagtttgcacagg...108...gttat	taaa
R. Mac	tcttcag	atgtatagaag...28...gctgaacaatcatggat	TCTGATCAA	TGTGCTTTA	GAAAT	tattgacagtttgcacagg...108...gttat	taaa
P. Tro	tcttcag	atgtacagaag...28...gctgaacaatcatggat	TCTGATCAA	TGTGCTTTA	GAAAT	tattgacagtttgcacagg...108...gttat	taaa
P. Abe	tcttcag	atgtacagaag...28...gctgaacaatcatggat	TCTGATCAA	TGTGCTTTA	GAAAT	tattgacagtttgcacagg...108...gttat	taaa
C. Jac	tcttcag	atgtacagaag...29...-ctgaacaatcatggat	TCTGATCAA	TGTGCTTTA	GAAAT	tattgacagtttgcacagg...108...gttat	taaa
M. Mus	ttttccag	atgtaccgaagg...28...gctgaacaatcatggat	TCTGATCAA	TGTGCTTTA	GAAAT	tattgacagtttgcacagg...108...gttat	taaa
R. Nor	tcttcag	atgtaccgaagg...28...gctgaacaatcatggat	TCTGATCAA	TGTGCTTTA	GAAAT	tattgacagtttgcacagg...108...gttat	taaa
C. Por	tcttcag	atgtacagaag...29...-ctgaacaatcatggat	TCTGATCAA	TGTGCTTTA	GAAAT	tattgacagtttgcacagg...108...gttat	taaa
O. Cun	tcttcag	atgtacagaag...29...gctgaacaatcatggat	TCTGATCAA	TGTGCTTTA	GAAAT	tattgacagtttgcacagg...108...gttat	taaa
C. Fam	tcttcag	atgtacagaag...28...gctgaacaatcatggat	TCTGATCAA	TGTGCTTTA	GAAAT	tattgacagtttgcacagg...109...gttat	taaa
F. Cat	tcttcag	atgtacagaag...28...gctgaacaatcatggat	TCTGATCAA	TGTGCTTTA	GAAAT	tattgacagtttgcacagg...108...gttat	taaa
B. Tau	tcttcag	atgtacagaag...28...gctgaacaatcatggat	TCTGATCAA	TGTGCTTTA	GAAAT	tattgacagtttgcacagg...108...gttat	taaa
E. Cab	tcttcag	atgtacaggagg...28...gctgaacaatcatggat	TCTGATCAA	TGTGCTTTA	GAAAT	tattgacagtttgcacagg...108...gttat	taaa
S. Sus	tcttcag	gtgtacagaag...32...gctgaacaatcatggat	TCTGATCAA	TGTGCTTTA	GAAAT	tattgacagtttgcacagg...108...gttat	taaa
O. Avi	tcttcag	atgtacagaag...28...gctgaacaatcatggat	TCTGATCAA	TGTGCTTTA	GAAAT	tattgacagttnnnnnnnn...108...gttat	taaa
		**** * * *	*****	*****	*****	*****	*****

id=689665 gene=ENSG00000153250 name=RBMS1 segment=chr2.161131051.161131275.-1 type=EN

H. Sap	aaaaaaa	gaaaagaaaact...2189...gttg	tt-aaacgcaaaagac	ATTTTGA	ctGTACA	TTGATCAG	attgtagcttttctgtt	ta...30...tctgaaatt	ttttcct
R. Mac	aagaaaa	aaaaagaaaact...2189...gttg	tt-aaacgcaaaagac	ATTTTGA	ctGTACA	TTGATCAG	attgtagcttttctgtt	ta...30...tctgaaatt	ttttcct
P. Tro	aaaaaaaa	gaaaagaaaact...2183...gttg	tt-aaacgcaaaagac	ATTTTGA	ctGTACA	TTGATCAG	attgtagcttttctgtt	ta...30...tctgaaatt	ttttcct
P. Abe	aaaagaaa	gaaaagaaaact...2181...gttg	tt-aaacgcaaaagac	ATTTTGA	ctGTACA	TTGATCAG	attgtagcttttctgtt	ta...30...tctgaaatt	ttttcct
C. Jac	aaaaaaaa	gaaaagaaaact...2183...gttg	tt-aaacgcaaaagac	ATTTTGA	ctGTACA	TTGATCAG	attgtagcttttctgtt	ta...30...tctgaaatt	ttttcct
M. Mus	aaaaaaga	gaaaagaaaac...2344...cttg	tt-aaacgcaaaagac	ATTTTGA	ctGTACA	TTGATCAG	attgtagcttttctgtt	ta...30...tctgaaact	ttcctcct
R. Nor	aaaaaaaa	gagagaaaaaga...2630...-ttg	tt-aaacgcaaaagac	ATTTTGA	ctGTACA	TTGATCAG	attgtagcttttctgtt	ta...30...tctgaaact	ttcctcct
C. Por	gaaaaaga	aaaaagaagact...2257...-tg	tt-aaacgcaaaagac	ATTTTGA	ctGTACA	TTGATCAG	attgtagcttttctgtt	ta...30...tctgaaact	ttttcct
O. Cun	agaaaaaa	agaaaaaagaac...2260...g	tt-aaacgcaaaagac	ATTTTGA	ctGTACA	TTGATCAG	attgtagcttttctgtt	ta...31...tctgaaatt	ttcctcct
C. Fam	aagaaaaa	aaaaagaaaact...2181...g	tt-aaacgcaaaagac	ATTTTGA	ctGTACA	TTGATCAG	attgtagcttttctgtt	ta...31...tctgaaatt	ttttcct
F. Cat	ggaaaaaa	gaaaaaaaagta...1632...g	tt-aaacgcaaaagac	ATTTTGA	ctGTACA	TTGATCAG	attgtagcttttctgtt	ta...31...tctgaaatt	ttttcct
B. Tau	gaaaaaaa	aaaaagaaaact...2172...g	tt-aaacgcaaaagac	ATTTTGA	ctGTACA	TTGATCAG	attgtagcttttctgtt	ta...33...-ctgaaatt	ttttcct
E. Cab	aaaaaaa	gaaaagaaaact...2182...-t	gt-aaacgcaaaagac	ATTTTGA	ctGTACA	TTGATCAG	attgtagcttttctgtt	ta...31...tctgaaatt	ttttcct
S. Sus	aaaaaaga	aaaagaaaact...2228...g	tt-aaacgcaaaagac	ATTTTGA	ctGTACA	TTGATCAG	attgtagcttttctgtt	ta...31...tctgaaatt	ttttcct
O. Avi	aaaaaaa	gaaaagaaaact...2166...g	tt-aaacgcaaaagac	ATTTTGA	ctGTACA	TTGATCAG	attgtagcttttctgtt	ta...32...tctgaaatt	ttttcct
		* *	*	****	*****	**	*****	****	* ****

id=689671 gene=ENSG00000153250 name=RBMS1 segment=chr2.161128662.161130970.-1 type=EN VIEW

Figure 556:



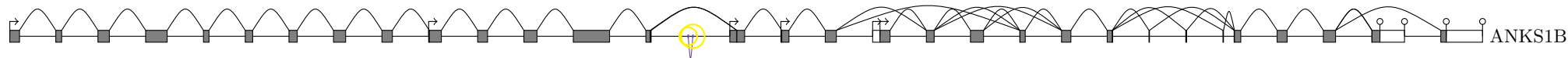
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R.Mac	agccatat	tcacatctgttt...105...--ccttaagtaacataaacagtg	TTGCGCTG	TGCTT	gcctggtaaattttgctttt...100...agaagcaacag	gtaaagaa
P.Tro	agccatat	tcacatctgttt...105...--ccttaagtaacataaacagtg	TTGCGCTG	TGCTT	gcctggtaaattttgctttt...100...agaagcaacag	gtaaagaa
C.Jac	agccatat	tcacatctgttt...101...--ccttaagtaacataaacagtg	TTGCGCTG	TGCTT	gcctggtaaattttgctttt...100...agaagcaacag	gtaaagaa
C.Por	agccatgt	tcacatgtttct...103...--ccttaagtaacataaacagtg	TTGCGCTG	TGCTT	gcctggtaaattttgctttt...100...agaagcaacag	gtaaagaa
O.Cun	agccatgt	tcacatctgttt...107...---ttaaagtaacataaacagtga	TGCGCTG	TGCTT	gcctggtaaattttgctttt...100...agaagcaacag	gtaaagaa
C.Fam	agccattt	tcacatctgttt...105...--ccttaagtaacataaatagtg	TTGCGCTG	TGCTT	gcctggtaaattttgctttt...100...agaagcaacag	gtaaagaa
F.Cat	agccattt	tcacatctgttt...105...--ccttaagtaacataaatagtg	TTGCGCTG	TGCTT	gcctggtaaattttgctttt...100...agaagcaacag	gtaaagaa
B.Tau	agccatgt	tcacctctgttt...105...--ccttaagtaacataaacagtg	TTGCGCTG	TGCTT	gcctggtaaattttgctttt...100...agaagcaacag	gtaaagaa
E.Cab	agccatgt	tcacatctgttt...105...--ccttaagtaacataaacagtg	TTGCGCTG	TGCTT	gcctggtaaattttgctttt...100...agaagcaacag	gtaaagaa
S.Sus	agccatgt	tcacctctgttt...105...--ccttaagtaacataaacagtg	TTGCGCTG	TGCTT	gcctggtaaattttgctttt...100...agaagcaacag	gtaaagaa
O.Avi	agccatgt	tcacctctgttt...103...aaccttaagtaac--aacagtg	TTGCGCTG	TGCTT	gcctggtaaattttgctttt...100...agaagcaacag	gtaaagaa
L.Afr	agccatgt	tcacatctgttt...107...--ccataagtaacataaacagtg	TTGCGCTG	TGCTT	gcctggtaaattttgctttt...100...agaagcaacag	gtaaagaa
*****	*	*****	**	*****	*****	*****

id=624355 gene=ENSG00000082898 name=XP01 segment=chr2_61752627_61752910_-1 type=AN

H.Sap	agccatat	tcacatctgttt...243...tgattagaggaacagaaaga	AAGCAACAG	GTAAA	gaa
R.Mac	agccatat	tcacatctgttt...243...tgattagaggaacagaaaga	AAGCAACAG	GTAAA	gaa
P.Tro	agccatat	tcacatctgttt...243...tgattagaggaacagaaaga	AAGCAACAG	GTAAA	gaa
C.Jac	agccatat	tcacatctgttt...239...tgattagaggaacagaaaga	AAGCAACAG	GTAAA	gaa
C.Por	agccatgt	tcacatgtttct...241...tgattagaggaacagaaaga	AAGCAACAG	GTAAA	gaa
O.Cun	agccatgt	tcacatctgttt...243...tgattagaggaacagaaaga	AAGCAACAG	GTAAA	gaa
C.Fam	agccattt	tcacatctgttt...243...tgattagaggaacagaaaga	AAGCAACAG	GTAAA	gaa
F.Cat	agccattt	tcacatctgttt...243...tgattagaggaacagaaaga	AAGCAACAG	GTAAA	gaa
B.Tau	agccatgt	tcacctctgttt...243...tgattagaggaacagaaaga	AAGCAACAG	GTAAA	gaa
E.Cab	agccatgt	tcacatctgttt...243...tgattagaggaacagaaaga	AAGCAACAG	GTAAA	gaa
S.Sus	agccatgt	tcacctctgttt...243...tgattagaggaacagaaaga	AAGCAACAG	GTAAA	gaa
O.Avi	agccatgt	tcacctctgttt...241...tgattagaggaacagaaaga	AAGCAACAG	GTAAA	gaa
L.Afr	agccatgt	tcacatctgttt...245...tgattagaggaacagaaaga	AAGCAACAG	GTAAA	gaa
*****	*	*****	**	*****	*****

id=624355 gene=ENSG00000082898 name=XP01 segment=chr2_61752627_61752910_-1 type=AN VIEW

Figure 557:



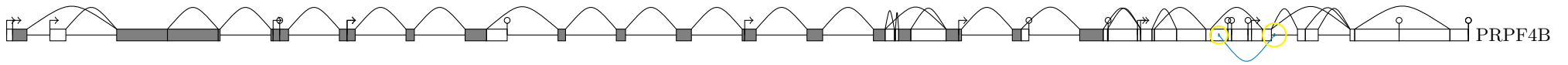
H. Sap	gaccacaa--	gtaaggcaacct...4498...	gggtgtgtaggaggaagcag	CAGCag	CAGGCt	TACAg	CTTGCAgac	-----	aaaaaaaaatctgcctta-...404...	tttcccaggggc	atgatgtg
R. Mac	gaccacaa--	gtaaggatacct...4498...	gggtgtgtaggaggaagcag	CAGCag	CAGGCt	TACAg	CTTGCAgac	-----	aaaaaaaaatctgcctta-...404...	tttcccaggggc	atgatgtg
P. Tro	gaccacaa--	gtaaggcaacct...4498...	gggtgtgtaggaggaagcag	CAGCag	CAGGCt	TACAg	CTTGCAgac	-----	aaaaaaaaatctgcctta-...404...	tttcccaggggc	atgatgtg
P. Abe	gaccacaa--	gtaaggaaacct...4498...	gggtgtgtaggaggaagcag	CAGCag	CAGGCt	TACAg	CTTGCAgac	-----	aaaaaaaaatctgcctta-...404...	tttcccaggggc	atgatgtg
R. Jac	gaccacaa--	gtaagggaacct...4498...	gggtgtgtaggaggaagcag	CAGCag	CAGGCt	TACAg	CTTGCAgac	-----	aaaaaaaaatctgcctta-...404...	tttcccaggggc	atgatgtg
R. Nor	ggccaccaat	gcaatgcgat--...4496...	gggtgtgtaggagggagcag	CAGCag	CAGGCt	TACAg	CTTGCAgac	-----	aaaaaaaaatctgcctt---...406...	tttcccaggacc	atgatgtg
C. Por	catcaciaa--	gtaagcgaattt...4499...	gggtgtgtaggaggaagcag	CAGCag	CAGGCt	TACAg	CTTGCAgac	-----	aaaaaaaaatctgcctta-...403...	tttcccaggagc	atgatgtg
O. Cun	gaccacaa--	gtaagcaaacct...4500...	gggtgtgtaggaggaagcag	CAGCag	CAGGCt	TACAg	CTTGCAgac	-----	aaaaaaaaatctgccttat...402...	tttcccaggagc	atgatgtg
C. Fam	gaccacaa--	gtaaggaaacct...4470...	gggtgtgtaggaggaagcag	CAGCag	CAGGCt	TACAg	CTTGCAgac	-----	cacacaaaaaaaaaaaaaga---...432...	tttcccaggagc	atgatgtg
B. Tau	gaatacaciaa--	gtaaggaaatct...4499...	gggtgtgtaggaggaagcag	CAGCag	CAGGCt	TACAg	CTTGCAgac	-----	aaaaaaaaatctgcctta-...403...	tttcccaggagc	atgatgtg
E. Cab	gatcaciaa--	gtaaggaaacct...4499...	gggtgtgtaggaggaagcag	CAGCag	CAGGCt	TACAg	CTTGCAgac	-----	aaaaaaaaatctgcctta-...403...	tttcccaggagc	atgatgtg
S. Sus	gaacaciaa--	gtaaggaaactg...4499...	gggtgtgtaggaggaagcag	CAGCag	CAGGCt	TACAg	CTTGCAgac	-----	aaaaaaaaatctgcctta-...403...	tttcccaggagc	atgatgtg
L. Afr	caccaaaa--	gtaaggaaatct...4500...	gggtgtgtaggaggaagcag	CAGCag	CAGGCt	TACAg	CTTGCAgac	-----	aaaaaaaaatctgccttat...402...	tttcccaggagc	atgatgtg
		* * *	*****	*****	*****	*****	*****		*****	*****	

id=97133 gene=ENSG0000185046 name=ANKS1B segment=chr12.99548271.99638119-1 type=IN

H. Sap	gaccacaa--	gtaaggcaacct...4562...	ctgatggctattattgaaaa	TGCGAGg	TGTAGCCTGg	GCTGg	gtaaatgaaggggagcgagc...342...	tttcccaggggc	atgatgtg
R. Mac	gaccacaa--	gtaaggatacct...4562...	ctgatggctattattgaaaa	TGCGAGg	TGTAGCCTGg	GCTGg	gtaaatgaaggggagcgagc...342...	tttcccaggggc	atgatgtg
P. Tro	gaccacaa--	gtaaggcaacct...4562...	ctgatggctattattgaaaa	TGCGAGg	TGTAGCCTGg	GCTGg	gtaaatgaaggggagcgagc...342...	tttcccaggggc	atgatgtg
P. Abe	gaccacaa--	gtaaggaaacct...4562...	ctgatggctattattgaaaa	TGCGAGg	TGTAGCCTGg	GCTGg	gtaaatgaaggggagcgagc...342...	tttcccaggggc	atgatgtg
R. Jac	gaccacaa--	gtaagggaacct...4562...	ctgatggctattattgaaaa	TGCGAGg	TGTAGCCTGg	GCTGg	gtaaatgaaggggagagagc...342...	tttcccaggggc	atgatgtg
R. Nor	ggccaccaat	gcaatgcgat--...4562...	ctgatggctattattgaaaa	TGCGAGg	TGTAGCCTGg	GTTGg	gtaaatgaaggggagcgagc...342...	tttcccaggacc	atgatgtg
C. Por	catcaciaa--	gtaagcgaattt...4563...	ctgatggctattattgaaaa	TGCGAGg	TGTAGCCTGg	GCTGg	gtaaatgaaggggagcgagc...341...	tttcccaggagc	atgatgtg
O. Cun	gaccacaa--	gtaagcaaacct...4563...	ctgatggctattattgaaaa	TGCGAGg	TGTAGCCTGg	GCTGg	gtaaatgaaggggagcgagc...341...	tttcccaggagc	atgatgtg
C. Fam	gaccacaa--	gtaaggaaacct...4563...	ctgatggctattattgaaaa	TGCGAGg	TGTAGCCTGg	GCTGg	gtaaatgaaggggagcgagc...341...	tttcccaggagc	atgatgtg
B. Tau	gaatacaciaa--	gtaaggaaatct...4563...	ctgatggctattattgaaaa	TGCGAGg	TGTAGCCTGg	GCTGg	gtaaatgaaggggagcgagc...341...	tttcccaggagc	atgatgtg
E. Cab	gatcaciaa--	gtaaggaaacct...4563...	ctgatggctattattgaaaa	TGCGAGg	TGTAGCCTGg	GCTGg	gtaaatgaaggggagcgagc...341...	tttcccaggagc	atgatgtg
S. Sus	gaacaciaa--	gtaaggaaactg...4563...	ctgatggctattattgaaaa	TGCGAGg	TGTAGCCTGg	GCTGg	gtaaatgaaggggagcgagc...341...	tttcccaggagc	atgatgtg
L. Afr	caccaaaa--	gtaaggaaatct...4563...	ctgatggctattattgaaaa	TGCGAGg	TGTAGCCTGg	GCTGg	gtaaatgaaggggagcgagc...341...	tttcccaggagc	atgatgtg
		* * *	*****	*****	*****	*****	*****		*****

id=97133 gene=ENSG0000185046 name=ANKS1B segment=chr12.99548271.99638119-1 type=IN VIEW

Figure 558:



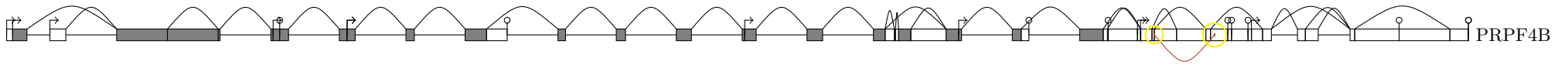
H.Sap	taaaagcg	gt--aattgcttct...29...ttttctttaagaatgtgact	TTAAAG	TGTTGTCTA	TGCAT	aaaacagttgacactcactt-...56...tgttctcagtat	gcatcact
R.Mac	taaaagcg	gt--aattgcttct...29...ttttctttaagaatgtgact	TTAAAG	TGTTGTCTA	TGCAT	aaaacagttgacactcactt-...56...tgttctcagtat	gcatcact
P.Tro	taaaagcg	gt--aattgcttct...29...ttttctttaagaatgtgact	TTAAAG	TGTTGTCTA	TGCAT	aaaacagttgacactcactt-...56...tgttctcagtat	gcatcact
P.Abe	taaaagcg	ggtaaatgctt-...38...-----ttaaagaatgtgactttaa	GTGTTGTCTA	TGCAT	aaaacagttgacactcactt-...58...tgttctcagtat	gcatcact	
C.Jac	taaaagcg	gt--aattgcttct...29...ttttctttaagaatgtgact	TTAAAG	TGTTGTCTA	TGCAT	aaaacagttgacactcactt-...56...tgttctcagtat	gcatcact
M.Mus	taaaagcg	gt--aattgcttct...29...ttttctttaagaatgtgact	TTAAAG	TGTTGTCTA	TGCAT	aaacagttgacactcactta...52...tgttctcagtat	gcatcact
R.Nor	taaaagcg	gt--aattgcttct...29...ttttctttaagaatgtgact	TTAAAG	TGTTGTCTA	TGCAT	aaacagttgacactcactta...55...tgttctcagtat	gcatcact
C.Por	taaaagcg	gt--aattgcttct...29...ttttctttgagactgtgacc	TTAAAG	TGTTGTCTA	TGCAT	aaaacagttgacactcactt-...55...tgttttcagttct	gcatctct
O.Cun	taaaagcg	gt--aattgcttct...29...ttttctttaaggatgtgact	TTAAAG	TGTTGTCTA	TGCAT	aaaacagttgacactcactt-...56...tgttctcagtat	gcatcact
C.Fam	taaaagcg	gt--aattgcttct...29...ttttctttaagaatgtgact	TTAAAG	TGTTGTCTA	TGCAT	aaaacagttgacactcactt-...56...tgttctcagtat	gcatcact
B.Tau	taaaagcg	gt--aattgcttct...30...ttttctttaaggatgtgact	TTAAAG	TGTTGTCTA	TGCAT	aaaacagttgacacctcactt-...56...tgttctcagtat	gcatcact
E.Cab	taaaagcg	gt--aattgcttct...29...ttttctttaagaatgtgact	TTAAAG	TGTTGTCTA	TGCAT	aaaacagttgacactcactt-...56...tgttctcagtat	gcatcact
L.Afr	taaaagcg	gt--aattgcttct...29...ttttctttaagaatgtgact	TTAAAG	TGTTGTCTA	TGCAT	aaaacagttgacactcactt-...56...tgttttcaggat	gcatcatt
	*****	* *****	*** *	*****	*****	*****	*****

id=85838 gene=ENSG00000112739 name=PRPF4B segment=chr6_4061935_4062104_1 type=AN

H.Sap	ttaacaag	gt-tatttctgacagc	ATGTGTAGAT	AAACATTAG	----caacaatttaagacaaaatc-...190...ttattcaccag	gcacctaa	
R.Mac	ttaacaag	gt-tatttctgacagc	ATGTGTAGAT	AAACATTAG	----caacaatttaagacaaaatc-...190...ttattcaccag	gcacctaa	
P.Tro	ttaacaag	gt-tatttctgacagc	ATGTGTAGAT	AAACATTAG	----caacaatttaagacaaaatc-...190...ttattcaccag	gcacctaa	
P.Abe	ttaacaag	gtctatttctgacagc	ATGTGTAGAT	AAACAT	caatttagcaacaatttaag-----...199...ttattcaccag	gcacctaa	
C.Jac	ttaacaag	gt-tatttctgacagc	ATGTGTAGAT	AAACATTAG	----caacaatttaagacaaaatc-...189...ttattcaccag	gcacctaa	
M.Mus	ttaacaag	gt-tatttctgacagc	ATGTGTAGAT	AAACATTAG	----cagcaatttaaaacaaaatc-...189...ttattcaccag	gcacctaa	
R.Nor	ttaacaag	gt-tatttctgacagc	ATGTGTAGAT	AAACATTAG	----caacaatttaaaacacaatc-...190...ttattcaccag	gcacctaa	
C.Por	ttaacaag	gt-tatttctgacagc	ATGTGTAGAT	AAACATTAG	----caacaatttaaaacagaatc-...171...ttattcaccag	gcacctaa	
O.Cun	ttaacaag	gt-tatttctgacagc	ATGTGTAGAT	AAACACTTAG	----caacaattt-aaacagaatca...181...ttatccaccag	gcacctaa	
C.Fam	ttaacaag	gt-tatttctgacagc	ATGTGTAGAT	AAACATTAG	----caacaatttaaaacaaaatca-...190...ttattcaccag	gcacctaa	
B.Tau	ttaacaag	gt-tatttctgacagc	ATGTGTAGAT	AAACATTAG	----caacagtttaaatcaaaatc-...189...ttattcaccag	gcacctaa	
E.Cab	ttaacaag	gt-tatttctgacagc	ATGTGTAGAT	AAACATTAG	----caacaatttaaaacaaaatc-...190...ttattcaccag	gcacctaa	
L.Afr	tttacaag	gt-tatttctgacagc	ATGTGTAGAT	AAACATTAG	----caacaatttaaaacaaaatc-...179...ttattcaccag	gcacctaa	
	** *****	** *****	*****	*	** ** * * *	**** *****	*****

id=85844 gene=ENSG00000112739 name=PRPF4B segment=chr6_4062534_4062790_1 type=IN VIEW

Figure 559:



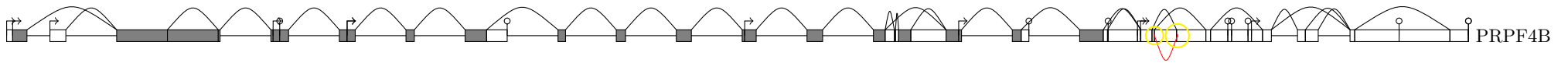
H. Sap	caggttgt	gtgcagca	TTCAgTACA	ctGAAG	GTAAGcta
R. Mac	caggttgt	gtgcagca	TTCAgTACA	ctGAAG	GTAAGcta
P. Tro	caggttgt	gtgcagca	TTCAgTACA	ctGAAG	GTAAGcta
P. Abe	caggttgt	gtgcagca	TTCAgTACA	ctGAAG	Gtaagcta
C. Jac	caggttgt	gtgcagc	ATTCAGTACA	ctGAAG	GTAAGcta
M. Mus	caggttgt	gtacaaca	TTCAgTACA	ctGAAG	GTAAGcta
R. Nor	caggttgt	gtacaaca	TTCAgTACA	ctGAAG	GTAAGcta
C. Por	caggttgt	gtacagca	TTCAgTACA	ctGAAG	GTAAGccg
O. Cun	caggttgt	gtccaaca	TTCAgTACA	ctGAAG	GTAAGcta
C. Fam	caggttgt	gtacaaca	TTCAgTACA	ctGAAG	GTAAGcta
E. Cab	caggttgt	gtacaaca	TTCAgTACA	ctGAAG	GTAAGcta
S. Sus	caggttgc	gtACAGca	TTCAgTACA	ctGAAG	Gtaagctg
L. Afr	caggttgt	gtacaaca	TTCAgTACA	ctGAAG	GTAAGcta
	**** **	** **	*****	*****	*****

id=85834 gene=ENSG00000112739 name=PRPF4B segment=chr6_4061359_4061381_1 type=AN

H. Sap	taaaagcg	gt--aattgcttctttacct--	TTTAT	ttCTTTTGTA	aaTGAAgcttttctttaagaatgtga----	...99..	tgttctcagtat	gcatcact
R. Mac	taaaagcg	gt--aattgcttctttacct--	TTTAT	ttCTTTTGTA	aaTGAAgcttttctttaagaatgtga----	...99..	tgttctcagtat	gcatcact
P. Tro	taaaagcg	gt--aattgcttctttacct--	TTTAT	ttCTTTTGTA	aaTGAAgcttttctttaagaatgtga----	...99..	tgttctcagtat	gcatcact
P. Abe	taaaagcg	ggtaaattgcttctttacctttat	CTTTTGTA	aaTGAAgcttttctttaagaatgtga----	...101..	tgttctcagtat	gcatcact	
C. Jac	taaaagcg	gt--aattgcttctttacct--	TTTAT	ttCTTTTGTA	aaTGAAgcttttctttaagaatgtgac----	...98..	tgttctcagtat	gcatcact
M. Mus	taaaagcg	gt--aattgcttctttacct--	TTTAT	ttCTTTTGTA	aaTGAAgcttttctttaaaatgtga----	...95..	tgttctcagtat	gcatcact
R. Nor	taaaagcg	gt--aattgcttctttacct--	TTTAT	ttCTTTTGTA	aaTGAAgcttttctttaaaatgtga----	...98..	tgttctcagtat	gcatcact
C. Por	taaaagcg	gt--aattgcttctttacct--	TTTAT	ttCTTTTGTA	aaTGAAgcttttctttgagactgtga----	...98..	tgttttcagctct	gcatcctc
O. Cun	taaaagcg	gt--aattgcttctttacct--	TTTAT	ttCTTTTGTA	aaTGAAgcttttctttaaggatgtga----	...99..	tgttctcagtat	gcatcact
C. Fam	taaaagcg	gt--aattgcttctttacct--	TTTAT	ttCTTTTGTA	aaTGAAgcttttctttaagaatgtga----	...99..	tgttctcagtat	gcatcact
E. Cab	taaaagcg	gt--aattgcttctttacct--	TTTAT	ttCTTTTGTA	aaTGAAgcttttctttaagaatgtga----	...99..	tgttctcagtat	gcatcact
S. Sus	taaaagcg	gt--aattgcttctttacctctcct--	CTTTTGTA	aaTGAAaCTGT	cctttaagaatgtgacttga...	95..	tgttctcagtc	gcatcact
L. Afr	taaaagcg	gt--aattgcttctttacct--	TTTAT	ttCTTTTGTA	aaTGAAgcttttctttaagaatgtga----	...99..	tgttttcagtat	gcatcatt
	*****	*	*****	*	*****	****	*****	*****

id=85838 gene=ENSG00000112739 name=PRPF4B segment=chr6_4061935_4062104_1 type=AN VIEW

Figure 560:



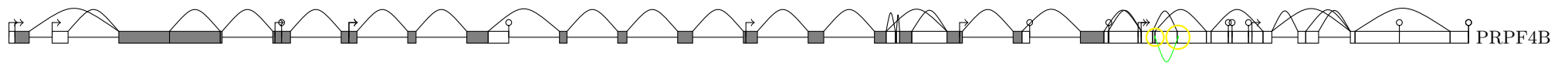
H. Sap	caggttgt	gtgcagcatt	CAGTACACTGAAG	GTaagcta
R. Mac	caggttgt	gtgcagcatt	CAGTACACTGAAG	GTaagcta
P. Tro	caggttgt	gtgcagcatt	CAGTACACTGAAG	GTaagcta
P. Abe	caggttgt	gtgcagcatt	CAGTACACTGAAG	GTaagcta
C. Jac	caggttgt	gtgcagcatt	CAGTACACTGAAG	GTaagcta
M. Mus	caggttgt	gtacaacatt	CAGTACACTGAAG	GTaagcta
R. Nor	caggttgt	gtacaacatt	CAGTACACTGAAG	GTaagcta
C. Por	caggttgt	gtacagcatt	CAGTACACTGAAG	GTaagccg
O. Cun	caggttgt	gtccaacatt	CAGTACACTGAAG	GTaagcta
C. Fam	caggttgt	gtacaacatt	CAGTACACTGAAG	GTaagcta
B. Tau	caggttgt	gtacagcatt	CAGTACACTGAAG	GTaagctg
E. Cab	caggttgt	gtacaacatt	CAGTACACTGAAG	GTaagcta
S. Sus	caggttgc	gtacagcatt	CAGTACACTGAAG	GTaagctg
L. Afr	caggttgt	gtacaacatt	CAGTACACTGAAG	GTaagcta
	**** **	** ** *****		*****

id=85834 gene=ENSG00000112739 name=PRPF4B segment=chr6_4061359_4061381_1 type=AN

H. Sap	cactgaag	gtaagctaaacc...179...acgcgcttgatggatagagc	GCCTTCAG	TGTA	CTGt
R. Mac	cactgaag	gtaagctaaacc...179...acgcgcttgatggatagagc	GCCTTCAG	TGTA	CTGt
P. Tro	cactgaag	gtaagctaaacc...179...acgcgcttgatggatagagc	GCCTTCAG	TGTA	CTGt
P. Abe	cactgaag	gtaagctaaacc...180...acgcgcttgatggatagagc	GCCTTCAG	TGTA	CTGt
C. Jac	cactgaag	gtaagctaaacc...179...acgcgcttgatggatagagc	GCCTTCAG	TGTA	CTGt
M. Mus	cactgaag	gtaagctaaacc...174...atgcgcttgatggatagagc	GCCTTCAG	TGTA	CTGt
R. Nor	cactgaag	gtaagctaaacc...176...atgcgcttgatggatagagc	GCCTTCAG	TGTA	CTGt
C. Por	cactgaag	gtaagccgccat...178...atgcgcttgatggatagagc	GCCTTCAG	TGTA	CTGt
O. Cun	cactgaag	gtaagctaaacc...181...acgcgcttgatggatagagc	GCCTTCAG	TGTA	CTGt
C. Fam	cactgaag	gtaagctaaacc...179...atgcgcttgatggatagagc	GCCTTCAG	TGTA	CTGt
B. Tau	cactgaag	gtaagctgaacc...176...acgcgcttgatggatagagc	GCCTTCAG	TGTA	CTGt
E. Cab	cactgaag	gtaagctaaacc...180...atgcgcttgatggatagagc	GCCTTCAG	TGTA	CTGt
S. Sus	cactgaag	gtaagctgaacc...180...atgcgcttgatggatagagc	GCCTTCAG	TGTA	CTGt
L. Afr	cactgaag	gtaagctaaacc...180...atgccttgatggatagaac	ACCTTCAG	TGTA	CTGt
	*****	*****	* ** ***** * ** * *****	*****	*****

id=85835 gene=ENSG00000112739 name=PRPF4B segment=chr6_4061382_4061600_1 type=AN VIEW

Figure 561:



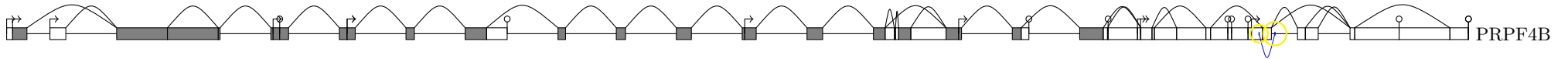
H. Sap	caggttgt	gtgcagcatt	CAGTACTGAAG	GTaagcta
R. Mac	caggttgt	gtgcagcatt	CAGTACTGAAG	GTaagcta
P. Tro	caggttgt	gtgcagcatt	CAGTACTGAAG	GTaagcta
P. Abe	caggttgt	gtgcagcatt	CAGTACTGAAG	GTaagcta
C. Jac	caggttgt	gtgcagcatt	CAGTACTGAAG	GTaagcta
M. Mus	caggttgt	gtacaacatt	CAGTACTGAAG	GTaagcta
R. Nor	caggttgt	gtacaacatt	CAGTACTGAAG	GTaagcta
C. Por	caggttgt	gtacagcatt	CAGTACTGAAG	GTaagcgg
O. Cun	caggttgt	gtccaacatt	CAGTACTGAAG	GTaagcta
C. Fam	caggttgt	gtacaacatt	CAGTACTGAAG	GTaagcta
B. Tau	caggttgt	gtacagcatt	CAGTACTGAAG	GTaagctg
E. Cab	caggttgt	gtacaacatt	CAGTACTGAAG	GTaagcta
S. Sus	caggttgc	gtacagcatt	CAGTACTGAAG	GTaagctg
L. Afr	caggttgt	gtacaacatt	CAGTACTGAAG	GTaagcta
	**** **	** ** *****		*****

id=85834 gene=ENSG00000112739 name=PRPF4B segment=chr6_4061359_4061381_1 type=AN

H. Sap	gCCTTCAG	TGTA	TGTTTCTTATTAACTTTACTTT...	249...	ctttcaatacag	gcataaac
R. Mac	gCCTTCAG	TGTA	TGTTTCTTATTAACTTTACTTT...	253...	ctttcaatacag	gcataaac
P. Tro	gCCTTCAG	TGTA	TGTTTCTTATTAACTTTACTTT...	249...	ctttcaatacag	gcataaac
P. Abe	gCCTTCAG	TGTA	TGTTTCTTATTAACTTTACTTT...	256...	ctttcaatacag	gcataaac
C. Jac	gCCTTCAG	TGTA	TGTTTCTTATTAACTTTACTTT...	251...	ctttcaatacag	gcataaac
M. Mus	gCCTTCAG	TGTA	TGTTTCTTATCAACTTTACTTT...	245...	ctttcaatacag	gcataaac
R. Nor	gCCTTCAG	TGTA	TGTTTCTTATTAACTTTACTTT...	245...	ctttcaatacag	gcataaac
C. Por	gCCTTCAG	TGTA	TGTTTCTTA-TAACTTTCCTTT...	251...	ctttcaatacag	gcataaac
O. Cun	gCCTTCAG	TGTA	TGTTTCTTATTAACTTTACTTT...	251...	ctttcaatacag	gcataaac
C. Fam	gCCTTCAG	TGTA	TGTTTCTTATTAACTTTAATTT...	248...	ctttcaatacag	gcataaac
B. Tau	gCCTTCAG	TGTA	TGTTTCTTAGTAACTTTCGTTT...	250...	ctttcaatacag	gcataaac
E. Cab	gCCTTCAG	TGTA	TGTTTCTTATTAACTTTAATTT...	253...	ctttcaatacag	gcataaac
S. Sus	gCCTTCAG	TGTA	TGTTTCTTATTACCTTTAATTT...	244...	ctttcaatacag	gcgtaaac
L. Afr	aCCTTCAG	TGTA	TGTTTCTTATTAACTTTAATTT...	249...	ctttcaatacag	gcataaac
	*****	*****	** ** * **	**	*****	** *****

id=85836 gene=ENSG00000112739 name=PRPF4B segment=chr6_4061601_4061888_1 type=AN VIEW

Figure 562:



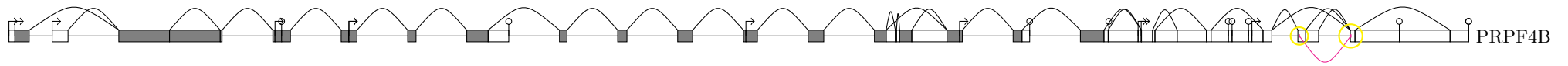
H.Sap	acaaatat	tgtcagctttca...29..gggtataattcaggatttaa	CTAATGTTTCTGC	tat t t t t c t a c t t t t c t t t t g a t g g t g c g g a a a g	agaaaaag
R.Mac	acaaatat	tgtcagctttca...29..gggtataattcaggatttaa	CTAATGTTTCTGC	tat t t t t c t a c t t t t c t t t t g a t g g t g c g g a a a g	agaaaaag
P.Tro	acaaatat	tgtcagctttca...29..gggtataattcaggatttaa	CTAATGTTTCTGC	tat t t t t c t a c t t t t c t t t t g a t g g t g c g g a a a g	agaaaaag
C.Jac	caaattat	tgtcagctttca...29..gggtataattcaggatttaa	CTAATGTTTCTGC	tat t t t t c t a c t t t t c t t t t g a t g g t g c g g a a a g	agaaaaag
M.Mus	tcaaattt	tgtcagctttca...36..gggtctaactcaggatttaa	CTAATGTTTCTGC	tat t t t t c t a c t t t t c t t t t g a t g g t g c g g a a a g	agaaaaag
R.Nor	tcagattt	tgtcagctttca...36..ggatataattcaggatttaa	CTAATGTTTCTGC	tat t t t t c t a c t t t t c t t t t g a t g g t g c g g a a a g	agaaaaag
C.Por	acaattat	tgtcagctttca...29..ggatataattcaggatttaa	CTAATGTTTCTGC	tat t t t t c t a c t t t t c t t t t g a t g g t g c g g a a a g	agaaaaag
O.Cun	acgagtgt	tgtcagctttca...29..gaccgcgattcaggatttaa	CTAATGTTTCTGC	tat t t t t c t a c t t t t c t t t t g a t g g t g c g g a a a g	agaaaaag
C.Fam	acaagtat	tgtcagctttca...29..gggtataattcaggatttaa	CTAATGTTTCTGC	tat t t t t c t a c t t t t c t t t t g a t g g t g c g g a a a g	agaaaaag
B.Tau	accagtat	tgtcagctttca...29..gggtagatccaggatttaa	CTAATGTTTCTGC	t g t t t t c t a c t t t t c t t c t g a t g g t g c g g a a a g	agaaacagg
E.Cab	acaaatat	tgtcagctttca...29..gggtataattcaggatttaa	CTAATGTTTCTGC	tat t t t t c t a c t t t t c t t t t g a t g g t g c g g a a a g	agaaaaaa
S.Sus	cgagatag	cggcagctcgca...29..gggtgcgactcagggtgtaa	CTAATGTTTCTGC	tat t t t t c t a c t t t c t c t c t g a t g g t g c g g a a a g	aggagaag
L.Afr	acaagtat	tgtcagctttca...29..gggtataattcaggatttaa	CTAATGTTTCTGC	tat t t t t c t a c t t t t c t t t t g a t g g t g c g g a a a g	agaaaaag
	*	* * * * *	*	*****	** * *

id=85842 gene=ENSG00000112739 name=PRPF4B segment=chr6_4062338_4062446_1 type=AN

H.Sap	ttaacaag	gttatttctgacagcatgt	GTAGatAAACATTTAG	caacaatttaagacaaaatc-...190...ttattcaccag	gcacctaa
R.Mac	ttaacaag	gttatttctgacagcatgt	GTAGatAAACATTTAG	caacaatttaagacaaaatc-...190...ttattcaccag	gcacctaa
P.Tro	ttaacaag	gttatttctgacagcatgt	GTAGatAAACATTTAG	caacaatttaagacaaaatc-...190...ttattcaccag	gcacctaa
C.Jac	ttaacaag	gttatttctgacagcatgt	GTAGatAAACATTTAG	caacaatttaagacaaaatc-...189...ttattcaccag	gcacctaa
M.Mus	ttaacaag	gttatttctgacagcatgt	GTAGatAAACATTTAG	cagcaatttaaaacaaaatc-...189...ttattcaccag	gcacctaa
R.Nor	ttaacaag	gttatttctgacagcatgt	GTAGatAAACATTTAG	caacaatttaaaacacaatc-...190...ttattcaccag	gcacctaa
C.Por	ttaacaag	gttatttctgacagcatgt	GTAGatAAACATTTAG	caacaatttaaaacagaatc-...171...ttattcaccag	gcacctaa
O.Cun	ttaacaag	gttatttctgacagcatgt	GTAGatAAACATTTAG	caacaattt-aaacagaatca...181...ttattcaccag	gcacctaa
C.Fam	ttaacaag	gttatttctgacagcatgt	GTAGatAAACATTTAG	caacaatttaaaacaaaatc-...190...ttattcaccag	gcacctaa
B.Tau	ttaacaag	gttatttctgacagcatgt	GTAGatAAACATTTAG	caacagtttaaatcaaatc-...189...ttattcaccag	gcacctaa
E.Cab	ttaacaag	gttatttctgacagcatgt	GTAGatAAACATTTAG	caacaatttaaaacaaaatc-...190...ttattcaccag	gcacctaa
S.Sus	ctaacaag	gttatttctgacagcatgt	GTAGatAAACATTTAG	caacaatttaaaacaaaatc-...187...ctattcaccag	gcacctaa
L.Afr	tttacaag	gttatttctgacagcatgt	GTAGatAAACATTTAG	caacaatttaaaacaaaatc-...179...ttattcaccag	gcacctaa
	*	*****	*****	*****	*****

id=85844 gene=ENSG00000112739 name=PRPF4B segment=chr6_4062534_4062790_1 type=IN VIEW

Figure 563:



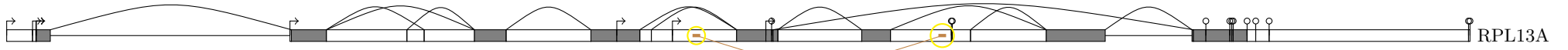
H. Sap	tcaccag	GCACCTAA	TACAA	caAGCAT	gcacattttggtgcattcaagaatggaaaatcagaatagcagcattgattcttctg	gtgggtt
R. Mac	tcaccag	GCACCTAA	TACAA	caAGCAT	gcacattttggtgcattcaagaatggaaaatcagaatagcagc----attcttctg	gtgggtt
P. Tro	tcaccag	GCACCTAA	TACAA	caAGCAT	gcacattttggtgcattcaagaatggaaaatcagaatagcagcattgattcttctg	gtgggtt
P. Abe	tcaccag	GCACCTAA	TACAA	caAGCAT	gcacattttggtgcattcaagaatggaaaatcagaatagcagcattgattcttctg	gtgggtt
C. Jac	tcaccag	GCACCTAA	TACAA	caAGCAT	gcacattttggtgcattcaagaatggaaaatcagaatagcagc----attcttctg	gtgggtt
M. Mus	tcaccag	GCACCTAA	TACAA	caAGCAT	gcacattttggtgcattcaagaatggaaaatcagaatagcagc----attcttctg	gtgggtt
R. Nor	tcaccag	GCACCTAA	TACAA	caAGCAT	gcacattttggtgcattcaagaatggaaaatcagaatagcagc----attcttctg	gtgggtt
C. Por	tcaccag	GCACCTAA	TACAA	caAGCAT	gcacattttggtgcattcaagaatggaaaatcagaatagcagc----attcttctg	gtgggtt
O. Cun	ccaccag	GCACCTAA	TACAA	cccgc	atgcacattttggtgcattcaagaatggaaaatcagaatagcagc----attcttctg	gtgggtt
C. Fam	tcaccag	GCACCTAA	TACAA	caAGCAT	gcacattttggtgcattcaagaatggaaaatcagaatagcagc----attcttctg	gtgggtt
E. Cab	tcaccag	GCACCTAA	TACAA	caAGCAT	gcacattttggtgcattcaagaatggaaaatcagaatagcagc----attcttctg	gtgggtt
S. Sus	tcaccag	GCACCTAA	TACAA	caGGCAT	gcacattttggtgcattcaagaatggaaaatcagaatagcagc----attcttctg	gtgggtt
L. Afr	tcaccag	GCACCTAA	TACAA	caAGCAT	gcacattttggtgcattcaagaatggaaaatcagaatagcagc----attcttctg	gtgggtt
	*****	*****	*****	*****	*****	*****

id=85845 gene=ENSG00000112739 name=PRPF4B segment=chr6_4062791_4062867_1 type=AN

H. Sap	aatacaag	gtg-at	tttcatc	---.264...	aaacaaagttgcttggtact	TGTTct	TTGTGtt	TTAG	GTGC	agct
R. Mac	aatgcaag	gtg-at	tttcatc	---.263...	aaacgaagttgcttggtact	TGTTct	TTGTGtt	TTAG	GTGC	agct
P. Tro	aatacaag	gtg-at	tttcatc	---.264...	aaacaaagttgcttggtact	TGTTct	TTGTGtt	TTAG	GTGC	agct
P. Abe	aatacaag	gtgca	tttcatc	---.265...	aaacaaagttgcttggtact	TGTTct	TTGTGtt	TTAG	GTGC	agct
C. Jac	aatacaag	gtg-at	tttcatc	---.264...	aaacaaagttgcttggtact	TGTTct	TTGTGtt	TTAG	GTGC	agct
M. Mus	aacacacg	gca-g	ttccagc	---.265...	acacaaagttgcttggtact	TGTTct	TTGTGtt	TTAG	GTGC	agat
R. Nor	aacacacg	gtg-a	-tccagta	...239...	aaacaaagttgcttggtact	TGTTct	TTGTGtt	TTAG	GTGC	Tgct
C. Por	aagtcaag	gtg-at	tgtctc	---.254...	aaacaaagttgcttggtact	TGTTct	TTGTGtt	TTAG	GTGC	agct
O. Cun	gatgcaag	gcg-at	tgtctc	---.280...	-----agttgcttggtact	TGTTct	TTGTGtt	TTAG	GTGC	agct
C. Fam	aattaaag	gtg-g	ttccatc	---.279...	aaacaaagttgcttggtact	TGTTct	TTGTGtt	TTAG	GTGC	agtt
E. Cab	agtgcaag	gtg-g	cttcatc	---.271...	aaacaaagttgcttggtact	TGTTct	TTGTGtt	TTAG	GTGC	agtt
S. Sus	aaggccag	gca-g	tgaggcct	---.252...	aaacaaagttgcttggtact	TGTTct	TTGTGtt	TTAG	GTGC	agct
L. Afr	aataccag	gtg-at	tttcccc	---.264...	aaacaaagttgcttggtact	TGTTct	TTGTGtt	TTAG	GTGC	agct
		*	*		*****	*****	*****	*****	*****	*

id=85847 gene=ENSG00000112739 name=PRPF4B segment=chr6_4062995_4063307_1 type=IN VIEW

Figure 564: CS=6.24



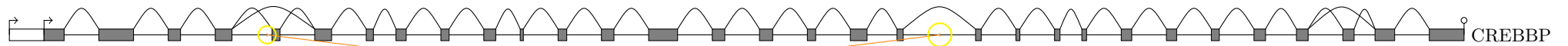
H. Sap	-cccactca	cattcgagtttcccgaccatgagatgactccaca	TGCAct	ACCATCTGAGG	ccaccccatgggccacctc-...51...gtcac-ccaacag	gtagtctg
R. Mac	-cccactct	cattcgagtttctcgaccgtgagatgactccaca	TGCAct	ACCATCTGAGG	ccac-cctggggcccacctca...50...gtcac-ccaacag	gcatgctg
P. Tro	-cccactca	cattcgagtttcccgaccatgagatgactccaca	TGCAct	ACCATCTGAGG	ccaccccatgggccacctc-...51...gtcac-ccaacag	gtagtctg
P. Abe	-cccactca	cattcgagtttcccgaccatgagatgactccaca	TGCAct	ACCATCTGAGG	ccactccatgggccacctc-...51...gtcac-tcaacag	gtagtctg
C. Jac	tcccact-a	tgttcgagtttcccgaccatgagatgactccaca	TGCAct	ACCATCTGAGG	ccac-ccatggacctgctca...47...-tccacccacag	gcatgctg
C. Por	-cccacttg	tgttcgagttcccgaaccatgagaagactctaca	TGCAct	ACCATCTGAGG	ccac-tgagctggcctggag...42...ctctg-tccccag	ggatgctg
O. Cun	-tccacgcg	tgttcgagttctcgcgaccgtgagatgactccaca	TGCAct	ACCATCTGAGG	cccc-gcagccccctgcag...33...cgtgc-tccgcag	gcatgctg
C. Fam	-cccacttg	tattcgagtttctgactatgagatgactccaca	TGCAct	ACCATCTGAGG	ccac-cactgtgacctgggg...56...atcca-cccacag	gcatgctg
F. Cat	-cccactcg	tgttcgagttcccgaaccatgagatgactccaca	TGCAct	ACCATCTGAGG	ccgc-ctgtgcgcccggcggg...39...ctctg-cccacag	gcatgctg
B. Tau	-cccactcg	tgttcgagtttcccgaccgtgagatgactccaca	TGCAct	ACCATCTGAGG	ccac-ctgtctgcctgcctgg...47...ctctg-tccacag	gcatgctg
E. Cab	-cccactcg	tgttcgagtttcccgaaccatgagatgactccaca	TGCAct	ACCATCTGAGG	ccgc-cggctgcccaccgtg...49...ctctg-cccgcag	gcatgctg
O. Avi	-cccactcg	tgttcgagtttcccgaaccgtgagatgactccaca	TGCAct	ACCATCTGAGG	ccac-ctgtctgcctgcctgg...47...ctctg-tccacag	gcatgctg
L. Afr	-cccgcttg	tgttcgagtttcccgaccatgagaagactttaca	TGCAct	ACCATCTGAGG	ccac-ccatctggcccacctgg...42...ccctg-ccatag	gtagtctg
	** *	***** * ** ***** **	*****	*	* **	*****

id=802666 gene=ENSG00000142541 name=RPL13A segment=chr19_49993902_49994035_1 type=AN

H. Sap	caagaaag	gt---gagtcaccagcttacgctgcaccatctacttgggagatttcaggcctgctgaggg---a-----c-ctgggg--acctggagc--ctggcagatgatgtcctta--	TCTCAc	GATGGTc	TGCG	gatgtccctgtggg-aatg	gcgacaat
R. Mac	cgagaaag	gt---gagtcaccagcttacgctgcaccgtctagtttggggatttcaggcctgctgaggg---a-----c-cctggg--gcccggagc--ctggcagatgatgtcctta--	TCTCAc	GATGGTc	TGCG	gatgtccctgcggg-aatg	gcgacaat
P. Tro	caagaaag	gt---gagtcaccagcttacgctgcaccatctacttgggagatttcaggcctgctgaggg---a-----c-ctgggg--acccggagc--ctggcagatgatgtcctta--	TCTCAc	GATGGTc	TGCG	gatgtccctgcggg-aatg	gcgacaat
P. Abe	caagaaag	gt---gagtcaccagcttacactgcccactctacttgggagatttcaggcctgctgaggg---a-----c-ctgggg--ccccggagc--ctggcagatgatgtcctta--	TCTCAc	GATGGTc	TGCG	gatgtccctgcggg-aatg	gcgacaat
C. Jac	caaggaag	gt---gagtcaccagcttccactatgctgcctactgtggggattttgggcctgctgaggg---g-----c-tgggggcccccaagc--ctggcagatgatgtcctta--	TCTCAc	GATGGTc	TGCG	gatgtccctgcggg-agtg	ccgacaat
C. Por	caaggaag	gt---gagtcaccaggtt-----acact-----ggggtcttctggcac-----agggaa-----c-ttagcc--tcctaaga--ctggcagatgatggctttt--	TCTCAc	GATGGTc	TGCG	gatgccac--tgggcagtg	ccgataac
O. Cun	cgcggaag	gt---gag-----cgcggggcgg-----gcggggagcggg-----c-gc-----g--ctggcagatgatgtcgtt--	TCTCAc	GATGGTc	TGCG	gaggcc--gcgggcgctg	ccgacaac
C. Fam	cacgaaag	gt---gagttccaggtt-----aggct-----gggtactctgacta-----gggggcaaa-----t-ctgagg--tccctgaaa--ctggcagatgatggctctt--	TCTCAc	GATGGTc	TGCG	gatgccacagtgggcagtg	ccgataat
F. Cat	cacggaag	gt---gagctgtcgtttacgtggagtgtctcgcggcggag-----gggggggtgga-----c-ttagg--tcccggagg--ctggcagatgatgtcctt--	TCTCAc	GATGGTc	TGCG	gatgccctgctggcagtg	ccgacaac
B. Tau	ctcgcaag	gt---gagcctccagatttctgagtgatgcct-tggagtctgaggcttctggggagggtg-----cacttagg--gtcctagga--ctggcagatgatggtttttt	TCTCAc	GATGGTc	TGCG	gatgccactgcccagtg	ccgaaaat
E. Cab	cacgaaag	gtgagcagctccaggttgccctgagaggcctaag-gggggctccctggcccactgggggtgat-----c-tttagg--tcccaga--ctggcagatgatggctttt	TCTCAc	GATGGTc	TGCG	gatgccactgtggcagtg	ccgataat
O. Avi	cgcggaag	gt---gagttcca-----gctccaggggttcag-----atggggagtggttctctgtgtgtaac-tccatg--tctccaagggttggcagatgatgcttc--	TCTCAc	GATGGTc	TGCG	aatgcctgtgtggcactg	ccgaaaac
L. Afr	cgcggaag	gt---gagttcca-----gctccaggggttcag-----atggggagtggttctctgtgtgtaac-tccatg--tctccaagggttggcagatgatgcttc--	TCTCAc	GATGGTc	TGCG	aatgcctgtgtggcactg	ccgataac
		*	*****	*****	* **	** **	*** **

id=802673 gene=ENSG00000142541 name=RPL13A segment=chr19_49994357_49994483_1 type=AN VIEW

Figure 565: CS=18.85



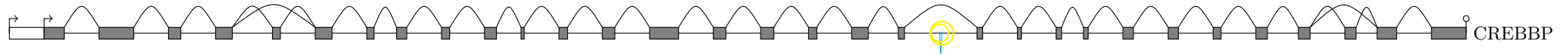
H.Sap	ctgccaag	gtaagtgcctt...1173...	cacttgttaccattttcct--a	TGGAat	CTGGCATTATAAT	ttaggtataattgaaagtgt...35...	ttctggtcata	ttgcccat
R.Mac	ctgccaag	gtaagtgcctt...1172...	cacttgttaccattttcct--a	TGGAat	CTGGCATTATAAT	ttaggtataattgaaagtgt...35...	ttctggtcata	ttgcccat
P.Tro	ctgccaag	gtaagtgcctt...1173...	cacttgttaccattttcct--a	TGGAat	CTGGCATTATAAT	ttaggtataattgaaagtgt...35...	ttctggtcata	ttgcccat
P.Abe	ctgccaag	gtaagtgcctt...1173...	cacttgttaccattttcct--a	TGGAat	CTGGCATTATAAT	ttaggtataattgaaagtgt...35...	ttctggtcata	ttgcccat
C.Jac	ctgccaag	gtaagtgcctt...1166...	cacttgttaccattttcct--a	TGGAat	CTGGCATTATAAT	ttaggtataattgaaagtgt...35...	ttctggtcata	ttgcccat
M.Mus	ctgccaag	gtaagtgcctt...1147...	--cttgttaccatttttttaa	TGGAat	CTGGCATTATAAT	ttaggtataattgaaagtgt...35...	ttctggtcata	ttgcccat
R.Nor	ctgccaag	gtaagtgcctt...1144...	--cttgttaccatttttttaa	TGGAat	CTGGCATTATAAT	ttaggtataattgaaagtgt...35...	ttctggtcata	ttgcccat
C.Por	ctgccaag	gtaagtgcctt...1166...	cacttgttaccattttcct--a	TGGAat	CTGGCATTATAAT	ttaggtataattgaaagtgt...35...	ttctggtcata	ttgcccat
O.Cun	ctgccaag	gtaagtgcctt...1094...	tacttgataccattttcct--a	TGGAat	CTGGCATTATAAT	ttaggtataattgaaagtgt...35...	ttctggtcata	ttgcccat
C.Fam	ctgtcaag	gtaagtgcctt...1199...	cacttgttaccattttcct--a	TGGAat	CTGGCATTATAAT	ttaggtataattgaaagtgt...35...	ttctggtcata	ttgcccat
F.Cat	ctgtcaag	gtaagtgcctt...1205...	catatgtaaccattttcct--a	TGGAat	CTGGCATTATAAT	ttaggtataattgaaagtgt...35...	ttctggtcata	ttgcccat
E.Cab	ctgtcaag	gtaagtgcctt...1232...	cacttgttaccattttcct--a	TGGAat	CTGGCATTATAAT	ttaggtataattgaaagtgt...35...	ttctggtcata	ttgcccat
S.Sus	ctgtcagg	gtaagtgcctt...1128...	cacttgttaccattttcct--a	TGGAat	CTGGCATTATAAT	ttaggtataattgaaagtgt...35...	ttctggtcata	ttgcccat
L.Afr	ctgtcaag	gtgggtgcctt...1195...	cacttgttaccattttcct--a	TGGAat	CTGGCATTATAAT	ttaggtataattgaaagtgt...35...	ttctggtcata	ttgcccat
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id=666126 gene=ENSG0000005339 name=CREBBP segment=chr16_3842096_3843386_-1 type=IN

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P.Tro	cagaatag	gtaagcgtcaag...4912...	cgttgcttgggtggctgtgt	GTTATGATGga	CCAGTTCA	cccaagtatggccttcttgctgacag	gtatcatt
P.Abe	cagaatag	gtaagcgtcaag...4912...	cgttgcttgggtggctgtgt	GTTATGATGga	CCAGTTCA	cccaagtatggccttcttgctgacag	gtatcatt
C.Jac	cagaatag	gtaagcgtcaag...4912...	cgttgcttgggtggctgtgt	GTTATGATGga	CCAGTTCA	cccaagtatggccttcttgctgacag	gtatcatt
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R.Nor	cagaatag	gtaagcgtcaag...4912...	cgttgcttgggtggctgtgt	GTTATGATGga	CCAGTTCA	cccaagtatggccttcttgctgacag	gtatcatt
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E.Cab	cagaatag	gtaagcgtcaag...4912...	cgttgcttgggtggctgtgt	GTTATGATGga	CCAGTTCA	cccaagtatggccttcttgctgacag	gtatcatt
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L.Afr	cagaatag	gtaagcgtcaag...4912...	cgttgcttgggtggctgtgt	GTTATGATGga	CCAGTTCA	cccaagtatggccttcttgctgacag	gtatcatt
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id=666156 gene=ENSG0000005339 name=CREBBP segment=chr16_3801808_3807288_-1 type=IN VIEW

Figure 567: CS=4.2



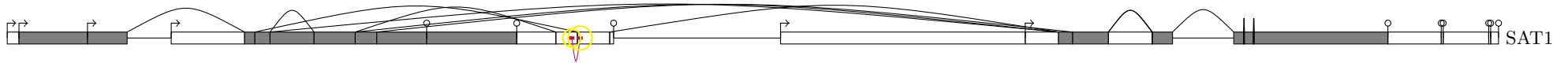
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R. Mac	cagaatag	gtaagtgtcaag...4895...	.gctctgattggtggcttcgt	TGCTTGGGTGGCTG	tgtgttatgatggaccagttcacccaagtatggccttcttgctgacag	gtatcatt
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C. Jac	cagaatag	gtaagcactgag...4895...	.gctctgattggtggcttcgt	TGCTTGGGTGGCTG	tgtgttatgatggaccagttcacccaagtatggccttcttgctgacag	gtatcatt
M. Mus	cagaatag	gtaagcatcatg...4895...	.gctctgattggtggcttcgt	TGCTTGGGTGGCTG	tgtgttatgatggaccagttcacccaagtatggccttcttgctgacag	gtatcatt
R. Nor	cagaatag	gtaagcatcagc...4895...	.gctctgattggtggcttcgt	TGCTTGGGTGGCTG	tgtgttatgatggaccagttcacccaagtatggccttcttgctgacag	gtatcatt
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D. Cun	cagaatag	gtaagcattcca...4895...	.gctctgattggtggcttcgt	TGCTTGGGTGGCTG	tgtgttatgatggaccagttcacccaagtatggccttcttgctgacag	gtatcatt
C. Fam	cagaatag	gtaagcaccgag...4895...	.gctctgattggtggcttcgt	TGCTTGGGTGGCTG	tgtgttatgatggaccagttcacccaagtatggccttcttgctgacag	gtatcatt
F. Cat	cagaacag	gtgagcaccgag...4895...	.gctctgattggtggcttcgt	TGCTTGGGTGGCTG	tgtgttatgatggaccagttcacccaagtatggccttcttgctgacag	gtatcatt
B. Tau	cagaatag	gtaagcactgag...4895...	.gctctgattggtggcttcgt	TGCTTGGGTGGCTG	tgtgttatgatggaccagttcacccaagtatggccttcttgctgacag	gtatcatt
E. Cab	cagaatag	gtaagcatcgag...4895...	.gctctgattggtggcttcgt	TGCTTGGGTGGCTG	tgtgttatgatggaccagttcacccaagtatggccttcttgctgacag	gtatcatt
S. Sus	cagaatag	gtaagccctggg...4895...	.gctctgattggtggcttcgt	TGCTTGGGTGGCTG	tgtgttatgatggaccagttcacccaagtatggccttcttgctgacag	gtatcatt
L. Afr	cagaatag	gtaagcatcaca...4895...	.gctctgattggtggcttcgt	TGCTTGGGTGGCTG	tgtgttatgatggaccagttcacccaagtatggccttcttgctgacag	gtatcatt
		***** ** ** *		***** ** ** *		***** ** ** *

id=666156 gene=ENSG0000005339 name=CREBBP segment=chr16.3801808_3807288_-1 type=IN

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R. Mac	cagaatag	gtaagtgtcaag...4924...	.ggctgtgtgttatgatggac	CAGTtCACCCAAGTA	tggccttcttgctgacag	gtatcatt
P. Tro	cagaatag	gtaagcgtcaag...4924...	.ggctgtgtgttatgatggac	CAGTtCACCCAAGTA	tggccttcttgctgacag	gtatcatt
P. Abe	cagaatag	gtaagcatcaag...4924...	.ggctgtgtgttatgatggac	CAGTtCACCCAAGTA	tggccttcttgctgacag	gtatcatt
C. Jac	cagaatag	gtaagcactgag...4924...	.ggctgtgtgttatgatggac	CAGTtCACCCAAGTA	tggccttcttgctgacag	gtatcatt
M. Mus	cagaatag	gtaagcatcatg...4924...	.ggctgtgtgttatgatggac	CAGTtCACCCAAGTA	tggccttcttgctgacag	gtatcatt
R. Nor	cagaatag	gtaagcatcagc...4924...	.ggctgtgtgttatgatggac	CAGTtCACCCAAGTA	tggccttcttgctgacag	gtatcatt
C. Por	cagaatag	gtaagcatccaa...4924...	.ggctgtgtgttatgatggac	CAGTtCACCCAAGTA	tggccttcttgctgacag	gtatcatt
D. Cun	cagaatag	gtaagcattcca...4924...	.ggctgtgtgttatgatggac	CAGTtCACCCAAGTA	tggccttcttgctgacag	gtatcatt
C. Fam	cagaatag	gtaagcaccgag...4924...	.ggctgtgtgttatgatggac	CAGTtCACCCAAGTA	tggccttcttgctgacag	gtatcatt
F. Cat	cagaacag	gtgagcaccgag...4924...	.ggctgtgtgttatgatggac	CAGTtCACCCAAGTA	tggccttcttgctgacag	gtatcatt
B. Tau	cagaatag	gtaagcactgag...4924...	.ggctgtgtgttatgatggac	CAGTtCACCCAAGTA	tggccttcttgctgacag	gtatcatt
E. Cab	cagaatag	gtaagcatcgag...4924...	.ggctgtgtgttatgatggac	CAGTtCACCCAAGTA	tggccttcttgctgacag	gtatcatt
S. Sus	cagaatag	gtaagccctggg...4924...	.ggctgtgtgttatgatggac	CAGTtCACCCAAGTA	tggccttcttgctgacag	gtatcatt
L. Afr	cagaatag	gtaagcatcaca...4924...	.ggctgtgtgttatgatggac	CAGTtCACCCAAGTA	tggccttcttgctgacag	gtatcatt
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id=666156 gene=ENSG0000005339 name=CREBBP segment=chr16.3801808_3807288_-1 type=IN VIEW

Figure 568:



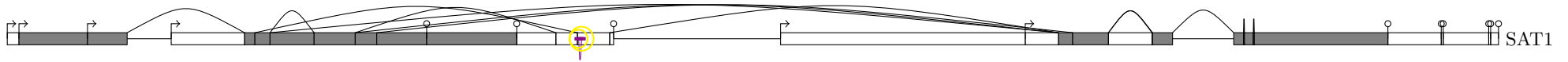
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R.Mac	atcttcag	gttacagtctctagcttcg	CCATGTACATGG	cccttcCGTgtac	atggatgg
P.Tro	atcttcag	gttacagtctctagcttcg	CCATGTACATGG	cccttcCGTgtac	atggatgg
P.Abe	atcttcag	gttacagtctctagcttcg	CCATGTACATGG	cccttcCGTgtac	atggatgg
C.Jac	atcttcag	gttacagtctctagcttcg	CCATGTACATGG	cccttcCGTgtac	atggatgg
C.Por	atcttcag	gttacagtctctagcttcg	CCATGTACATGG	cccttcCGTgtac	atggatgg
O.Cun	atcttcag	gttacagtctctagcttcg	CCATGTACATGG	cccttcCGTgtac	atggatgg
C.Fam	atcttcag	gttacagtctctagcttcg	CCATGTACATGG	cccttcCGTgtac	atggatgg
F.Cat	atcttcag	gttacagtctctagcttcg	CCATGTACATGG	cccttcCGTgtac	atggatgg
B.Tau	atcttcag	gttacagtctctagcttcg	CCATGTACATGG	cccttcCGTgtac	atggatgg
E.Cab	atcttcag	gttacagtctctagcttcg	CCATGTACATGG	cccttcCGTgtac	atggatgg
S.Sus	atcttcag	gttacagtctctagcttcg	CCATGTACATGG	cccttcCGTgtac	atggatgg
L.Afr	atcttcag	gttacagtctctagcttcg	CCATGTACATGG	cccttcCGTgtac	atggatgg
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id=26158 gene=ENSG00000130066 name=SAT1 segment=chrX_23802411_23802454.1 type=AN

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R.Mac	atcttcag	gttacagtctctagcttcg	ccatgtacatggccctt	CCGTGTAC	ATGGatgg
P.Tro	atcttcag	gttacagtctctagcttcg	ccatgtacatggccctt	CCGTGTAC	ATGGatgg
P.Abe	atcttcag	gttacagtctctagcttcg	ccatgtacatggccctt	CCGTGTAC	ATGGatgg
C.Jac	atcttcag	gttacagtctctagcttcg	ccatgtacatggccctt	CCGTGTAC	ATGGatgg
C.Por	atcttcag	gttacagtctctagcttcg	ccatgtacatggccctt	CCGTGTAC	ATGGatgg
O.Cun	atcttcag	gttacagtctctagcttcg	ccatgtacatggccctt	CCGTGTAC	ATGGatgg
C.Fam	atcttcag	gttacagtctctagcttcg	ccatgtacatggccctt	CCGTGTAC	ATGGatgg
F.Cat	atcttcag	gttacagtctctagcttcg	ccatgtacatggccctt	CCGTGTAC	ATGGatgg
B.Tau	atcttcag	gttacagtctctagcttcg	ccatgtacatggccctt	CCGTGTAC	ATGGatgg
E.Cab	atcttcag	gttacagtctctagcttcg	ccatgtacatggccctt	CCGTGTAC	ATGGatgg
S.Sus	atcttcag	gttacagtctctagcttcg	ccatgtacatggccctt	CCGTGTAC	ATGGatgg
L.Afr	atcttcag	gttacagtctctagcttcg	ccatgtacatggccctt	CCGTGTAC	ATGGatgg
	*****	*****	*****	*****	*****

id=26158 gene=ENSG00000130066 name=SAT1 segment=chrX_23802411_23802454.1 type=AN VIEW

Figure 569:



H. Sap	atcttcag	gttacagtcctctagcttcgccatgtacatg	GCCCtTCCGTGTAC	A----	TGG	-----atgg
R. Mac	atcttcag	gttacagtcctctagcttcgccatgtacatg	GCCCtTCCGTGTAC	A----	TGG	-----atgg
P. Tro	atcttcag	gttacagtcctctagcttcgccatgtacatg	GCCCtTCCGTGTAC	A----	TGG	-----atgg
P. Abe	atcttcag	gttacagtcctctagcttcgccatgtacatg	GCCCtTCCGTGTAC	A----	TGG	-----atgg
C. Jac	atcttcag	gttacagtcctctagcttcgccatgtacatg	GCCCtTCCGTGTAC	A----	TGG	-----atgg
M. Mus	a-----	-----TCTTcaGGTTAC	agTCTCTAGCTTcgCCATGTACATG	gccttctgtgtacatggatgg		
R. Nor	a-----	-----TCTTcaGGTTAC	agTCTCTagcttcgccatgtacatggccttctgtgtacatggatgg			
C. Por	atcttcag	gttacagtcctctagcttcgccatgtacatg	GCCCtTCCGTGTAC	A----	TGG	-----atgg
O. Cun	atcttcag	gttacagtcctctagcttcgccatgtacatg	GCCCtTCCGTGTAC	A----	TGG	-----atgg
C. Fam	atcttcag	gttacagtcctctagcttcgccatgtacatg	GCCCtTCCGTGTAC	A----	TGG	-----atgg
F. Cat	atcttcag	gttacagtcctctagcttcgccatgtacatg	GCCCtTCCGTGTAC	A----	TGG	-----atgg
B. Tau	atcttcag	gttacagtcctctagcttcgccatgtacatg	GCCCtTCCGTGTAC	A----	TGG	-----atgg
E. Cab	atcttcag	gttacagtcctctagcttcgccatgtacatg	GCCCtTCCGTGTAC	A----	TGG	-----atgg
S. Sus	atcttcag	gttacagtcctctagcttcgccatgtacatg	GCCCtTCCGTGTAC	A----	TGG	-----atgg
L. Afr	atcttcag	gttacagtcctctagcttcgccatgtacatg	GCCCtTCCGTGTAC	A----	TGG	-----atgg
	*		**** * **	*	**	****

id=26158 gene=ENSG00000130066 name=SAT1 segment=chrX_23802411_23802454_1 type=AN

H. Sap	-----c	CGTGAT	ATGGAtGGGc	ggggaggtaactaaaagatcctttacac-aataaagtagatgatcatgataaatgag	gtaaggtc	
R. Mac	-----c	CGTGAT	ATGGAtGGGc	ggggaggtaactaaaagatcctttacac-aataaagtagatgatcatgataaatgag	gtaaggtc	
P. Tro	-----c	CGTGAT	ATGGAtGGGc	ggggaggtaactaaaagatcctttacac-aataaagtagatgatcatgataaatgag	gtaaggtc	
P. Abe	-----c	CGTGAT	ATGGAtGGGc	ggggaggtaactaaaagatcctttacac-aataaagtagatgatcatgataaatgag	gtaaggtc	
C. Jac	-----c	CGTGAT	ATGGAtGGGc	ggggaggtaactaaaagatcctttacac-aataaagtagatgatcatgataaatgag	gtaaggtc	
M. Mus	-----c	TGTGTAC	ATGGAtGGGcGGGAgGTAAC	TaaAGAGccctttacac-aataaagtagatgatcatgataaatgag	gtaaggtc	
R. Nor	ctgtgtacatggatgnc	---	GGGAGGGT	-----AACTaaAAGAT	-cctttacacaaataaagtagatgatcatgataaatgag	gtaaggtc
C. Por	-----c	CGTGAT	ATGGAtGGGc	ggggaggtaactaaaagatcctttacac-aataaagtagatgatcatgataaatgag	gtaaggtc	
O. Cun	-----c	CGTGAT	ATGGAtGGGc	ggggaggtaactaaaagatcctttacac-aataaagtagatgatcatgataaatgag	gtaaggtc	
C. Fam	-----c	CGTGAT	ATGGAtGGGc	ggggaggtaactaaaagatcctttacac-aataaagtagatgatcatgataaatgag	gtaaggtc	
F. Cat	-----c	CGTGAT	ATGGAtGGGc	ggggaggtaactaaaagatcctttacac-aataaagtagatgatcatgataaatgag	gtaaggtc	
B. Tau	-----c	CGTGAT	ATGGAtGGGc	ggggaggtaactaaaagatcctttacac-aataaagtagatgatcatgataaatgag	gtaaggcc	
E. Cab	-----c	CGTGAT	ATGGAtGGGc	ggggaggtaactaaaagatcctttacac-aataaagtagatgatcatgataaatgag	gtaaggtc	
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L. Afr	-----c	CGTGAT	ATGGAtGGGc	ggggaggtaactaaaagatcctttacac-aataaagtagatgatcatgataaatgag	gtaaggcc	
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id=26159 gene=ENSG00000130066 name=SAT1 segment=chrX_23802455_23802520_1 type=AN VIEW

Figure 570:



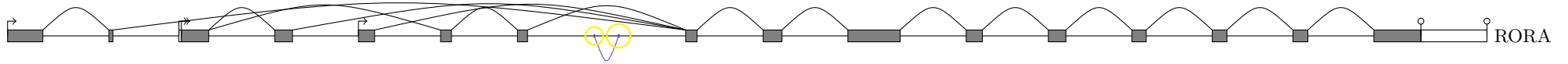
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R. Mac	gaatacag	gatgggaccaggcgcttg	tactcggagccaggctgctctccaggcattg	TGTAAGC	TCTTg	TGTTg	TGCT	ctctttcag	gtaggata
P. Tro	gaatacag	gacgggaccaggcgcttg	tactcggagccaggctgctctccaggcattg	TGTAAGC	TCTTg	TGTTg	TGCT	ctctttcag	gtaggata
P. Abe	gaatacag	gacgggaccaggcgcttg	tactcggagccaggctgctctccaggcattg	TGTAAGC	TCTTg	TGTTg	TGCT	ctctttcag	gtaggata
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R. Nor	gaatacag	gacggga-ccagggccttg	tactcggagccaggctgctctccaggcattg	TGTAAGC	TCTTg	TGTTg	TGCT	ctctttcag	gtaggata
C. Por	gaatacag	gacggga-ccagggccttg	tactcggagccaggctgctctccaggcattg	TGTAAGC	TCTTg	TGTTg	TGCT	ctctttcag	gtaggata
O. Cun	gaatacag	gacggga-ccagggccttg	tactcggagccaggctgctctccaggcattg	TGTAAGC	TCTTg	TGTTg	TGCT	ctctttcag	gtaggata
C. Fam	gaatacag	gacggga-ccagggccttg	tactcggagccaggctgctctccaggcattg	TGTAAGC	TCTTg	TGTTg	TGCT	ctctttcag	gtaggata
F. Cat	gaatacag	gacggga-ccagggccttg	tactcggagccaggctgctctccaggcattg	TGTAAGC	TCTTg	TGTTg	TGCT	ctctttcag	gtaggata
B. Tau	gaatacag	gacggga-ccagggccttg	tactcggagccaggctgctctccaggcattg	TGTAAGC	TCTTg	TGTTg	TGCT	ctctttcag	gtaggata
E. Cab	gaatacag	gacggga-ccagggccttg	tactcggagccaggctgctctccaggcattg	TGTAAGC	TCTTg	TGTTg	TGCT	ctctttcag	gtaggata
O. Avi	nnnnnag	gacggga-ccagggccttg	tactcggagccaggctgctctccaggcattg	TGTAAGC	TCTTg	TGTTg	TGCT	ctctttcag	gtaggata
L. Afr	gaatacag	gacggga-ccagggccttg	tactcggagccaggctgctctccaggcattg	TGTAAGC	TCTTg	TGTTg	TGCT	ctctttcag	gtaggata
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R. Mac	ctcgggct	gcggtcatatat...36...	tttcattgcttcatgtttc	AGTAAACA	aaAGGAGTTTGTG	accaa	ctatgttt
P. Tro	ctcgggct	gcggtcatatat...36...	tttcattgcttcatgtttc	AGTAAACA	aaAGGAGTTTGTG	accaa	ctatgttt
P. Abe	ctcgggct	gcggtcatatat...36...	tttcattgcttcatgtttc	AGTAAACA	aaAGGAGTTTGTG	accaa	ctatgttt
C. Jac	ctcgggct	gcggtcatatat...36...	tttcattgcttcatgtttc	AGTAAACA	aaAGGAGTTTGTG	accaa	ctatgttt
M. Mus	ctcgggct	gcggtcatatat...36...	tttcattgcttcatgtttc	AGTAAAC-	AaAGGAaTTTGTG	accaa	ctatgttt
R. Nor	ctcgggct	gcggtcatatat...36...	tttcattgcttcatgtttc	AGTAAAC-	AaAGGAaTTTGTG	accaa	ctatgttt
C. Por	ctcgggct	gcggtcatatat...36...	tttcattgcttcatgtttc	AGTAAAC-	AaAGGAGTTTGTG	accaa	ctatgttt
O. Cun	ctcgggct	gcggtcatatat...36...	tttcattgcttcatgtttc	AGTAAAC-	AaAGGAGTTTGTG	accaa	ctatgttt
C. Fam	ctcgggct	gcggtcatatat...36...	tttcattgcttcatgtttc	AGTAAAC-	AaAGGAGTTTGTG	accaa	ctatgttt
F. Cat	ctcgggct	gcggtcatatat...36...	tttcattgcttcatgtttc	AGTAAAC-	AaAGGAGTTTGTG	accaa	ctatgttt
B. Tau	ctcgggct	gcggtcatatat...36...	tttcattgcttcatgtttc	AGTAAAC-	AaAGGAGTTTGTG	accaa	ctatgttt
E. Cab	ctcgggct	gcggtcatatat...36...	tttcattgcttcatgtttc	AGTAAAC-	AaAGGAaTTTGTG	accaa	ctatgttt
O. Avi	ctcgggct	gcggtcatatat...36...	tttcattgcttcatgtttc	AGTAAAC-	AaAGGAGTTTGTG	accaa	ctatgttt
L. Afr	ctcgggct	gcggtcatatat...36...	tttcattgcttcatgtttc	AGTAAAC-	AaAGGAGTTTGTG	accaa	ctatgttt
		*****	*****	**	*****	*****	*****

id=573727 gene=ENSG00000173914 name=RBM4B segment=chr11.66432925.66433018_-1 type=EN VIEW

Figure 571:



```

H. Sap --catgaatg gtgaggggaaac...4715...aaatgctgattccagctcttcTTGTGggTTCTTAAACACCTTctcaaatgaccattttaat...189...cttctggtgcag ctcaaat
R. Mac --catgactg gtgaggggaaac...4715...aaatgctgattccagctcttcTTGTGggTTCTTAAACACCTTctcaaatgaccattttaat...189...cttctggtgcag ctcaaat
P. Tro --catgaatg gtgaggggaaac...4715...aaatgctgattccagctcttcTTGTGggTTCTTAAACACCTTctcaaatgaccattttaat...189...cttctggtgcag ctcaaat
P. Abe --catgaatt gtgaggggaaac...4715...aaatgctgattccagctcttcTTGTGggTTCTTAAACACCTTctcaaatgaccattttaat...189...cttctggtgcag ctcaaat
C. Jac --catgaagg gtgaggggaaac...4716...-aatgctgattccagctcttcTGTGggTTCTTAAACACCTTctcaaatgaccattttaat...189...cttctggtgcag ctcaaat
M. Mus aatggccgag gtgagga--aac...4723...-----attccagctcttctgtgggcTCTTAAACACCTTctcaaatgaccattttaat...189...cttctggtgcag ctcaaat
R. Nor --tgcccaag acgaggggacac...4723...-----attccagctcttctgtgggcTCTTAAACACCTTctcaaatgaccattttaat...189...cttctggtgcag ctcaaat
C. Por --tgagagag gtgaggaacaat...4715...aaatgctgattccagctcttcTTGTGggTTCTTAAACACCTTctcaaatgaccattttaat...189...cttctggtgcag ctcaaat
O. Cun --tgtgagca atgagggggagt...4716...-aatgctgattccagctcttcTGTGggTTCTTAAACACCTTctcaaatgaccattttaat...189...cttctggtgcag ctcaaat
B. Tau --catgaatg gtgaggggaaac...4715...aaatgctgattccagctcttcTTGTGggTTCTTAAACACCTTctcaaatgaccattttaat...189...cttctggtgcag ctcaaat
E. Cab --cgtgaata gtgaagggaaac...4715...aaatgctgattccagctcttcTTGTGggTTCTTAAACACCTTctcaaatgaccattttaat...189...cttctggtgcag ctcaaat
S. Sus --caggactg gtagaaggaat...4715...aaatgctgattccagctcttcTTGTGggTTCTTAAACACCTTctcaaatgaccattttaat...189...cttctggtgcag ctcaaat
L. Afr --catgagtg atgagggaaaat...4715...aaatgctgattccagccttcTTGTGggTTCTTAAACACCTTctcagatgaccattttaat...189...cttctggtgcag ctcaaat
*****  ***  *****  *****  *****  *****  *****  *****  *****  *****

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id=208102 gene=ENSG0000069667 name=RORA segment=chr15_60824051_60849051_-1 type=IN

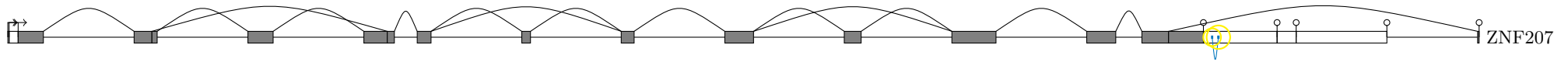
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H. Sap --catgaatg gtgaggggaaac...4907...tgatcaggggaacacttttatAAGGTGTTTaaAAGAAaaTGTAAttaactggttgcgtgcttctggtgcag ctcaaat
R. Mac --catgactg gtgaggggaaac...4907...tgatcaggggaacgcttttatAAGGTGTTTaaAAGAAaaTGTAAttaactggttgcgtgcttctggtgcag ctcaaat
P. Tro --catgaatg gtgaggggaaac...4907...tgatcaggggaacgcttttatAAGGTGTTTaaAAGAAaaTGTAAttaactggttgcgtgcttctggtgcag ctcaaat
P. Abe --catgaatg gtgaggggaaac...4907...tgatcaggggaacacttttatAAGGTGTTTaaAAGAAaaTGTAAttaactggttgcgtgcttctggtgcag ctcaaat
C. Jac --catgaagg gtgaggggaaac...4907...tgatcaggggaacgcttttatAAGGTGTTTaaAAGAAaaTGTAAttaactggttgcgtgcttctggtgcag ctcaaat
M. Mus aatggccgag gtgagga--aac...4907...tgatcgggggaacacttttatAAGGTGTTTaaAAGAaaatgtaattaactggttgcgtgcttctggtgcag ctcaaat
R. Nor --tgcccaag acgaggggacac...4907...tgatcgggggaacgcttttatAAGGTGTTTaaAAGAaaatgtaattaactggttgcgtgcttctggtgcag ctcaaat
C. Por --tgagagag gtgaggaacaat...4907...tgatcaggggaacgcttttatAAGGTGTTTaaAAGAAaaTGTAAttaactggttgcgtgcttctggtgcag ctcaaat
O. Cun --tgtgagca atgagggggagt...4907...tgatcaggggaacgcttttatAAGGTGTTTaaAAGAAaaTGTAAttaactggttgcgtgcttctggtgcag ctcaaat
B. Tau --catgaatg gtgaggggaaac...4907...tgatcaggggaacgcttttatAAGGTGTTTaaAAGAAaaTGTAAttaactggttgcgtgcttctggtgcag ctcaaat
E. Cab --cgtgaata gtgaagggaaac...4907...tgatcaggggaacgcttttatAAGGTGTTTaaAAGAAaaTGTAAttaactggttgcgtgcttctggtgcag ctcaaat
S. Sus --caggactg gtagaaggaat...4907...tgatcaggggaacgcttttatAAGGTGTTTaaAAGAAaaTGTAAttaactggttgcgtgcttctggtgcag ctcaaat
L. Afr --catgagtg atgagggaaaat...4907...tgatcaggggaacgcttttatAAGGTGTTTaaAAGAAaaTGTAAttaactggttgcgtgcttctggtgcag ctcaaat
*****  *****  *****  *****  *****  *****  *****  *****  *****  *****

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id=208102 gene=ENSG0000069667 name=RORA segment=chr15_60824051_60849051_-1 type=IN VIEW

Figure 572:



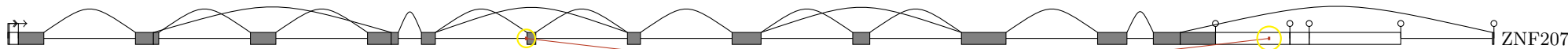
H.Sap	ataat-aaa	gcaggaacttttcctgaagttgcaatttatactgTATGgCTTCTTTTT	catgtttcatctagggttttt...326...gagagaaaaatt	tatgcctt
R.Mac	ataat-aaa	gcaggaacttttcctgaagttgcaatttatactgTATGgCTTCTTTTT	catgtttcatctagggttttt...326...gagagaaaaatt	tatgcctt
P.Tro	ataat-aaa	gcaggaacttttcctgaagttgcaatttatactgTATGgCTTCTTTTT	catgtttcatctagggttttt...326...gagagaaaaatt	tatgcctt
P.Abe	ataat-aaa	gcaggaacttttcctgaagttgcaatttatactgTATGgCTTCTTTTT	catgtttcatctagggttttt...326...gagagaaaaatt	tatgcctt
C.Jac	ggaat-aaa	gcaggagcttttcctgaagttgcaatttatactgTATGgCTTCTTTTT	catgtttcatctagggttttt...327...gagagaaaaatt	tatgcctt
M.Mus	ataat-aaa	acaggaacttttcctgaagttgcaatttatactgTATGgCTTCTTTTT	catgtttcatctagggttttt...335...gagacaaaaatt	tatgcctt
R.Nor	ataat-aaa	acaggaacttttcctgaagttgcaatttatactgTATGgCTTCTTTTT	catgtttcatctagggttttt...333...gagacaaaaatt	tatgcctt
C.Por	-taataaaa	gcaggagtttttcctgaagttgcaatttatactgTATGgCTTCTTTTT	catgtttcatctagggttttt...330...gagagaaaaatt	tatgcctt
C.Fam	ataat-aaa	gcaggaacttttcctgaagttgcaatttatactgTATGgCTTCTTTTT	catgtttcatctagggttttt...326...gagagaaaaact	tatgcctt
F.Cat	ataat-aaa	gcaggaacttttcctgaagttgcaatttatactgTATGgCTTCTTTTT	catgtttcatctagggttttt...326...gagagaaaaact	tatgcctt
B.Tau	ataat-aaa	gcaggaacttttcctgaagttgcaatttatactgTATGgCTTCTTTTT	catgtttcatctagggttttt...327...gagagaaaaatt	tatgcctt
E.Cab	ataat-aaa	gcaggaa-ttttcctgaagttgcaatttatactgTATGgCTTCTTTTT	catgtttcatctagggttttt...328...gagagaaaaatt	catgcctt
S.Sus	ataat-aaa	gcaggaacttttcctgaagttgcaatttatactgTATGgCTTCTTTTT	catgtttcatctagggttttt...327...gagagaaaagt	tatgcctt
L.Afr	ataat-aaa	gcaggaacttttcctgaagttgcaatttatactgTATGgCTTCTTTTT	catgtttcatctagggttttt...327...gagagaaaaatt	tatgcctt
	*** **	*****	**** **	*****

id=677051 gene=ENSG0000010244 name=ZNF207 segment=chr17_30696957_30697362.1 type=AN

H.Sap	ataat-aaa	gcaggaactttt...36...catgtttcatctagggtttttAGAAGtGAAGTATAgtaaatttggttcgtaaataat...292...gagagaaaaatt	tatgcctt
R.Mac	ataat-aaa	gcaggaactttt...36...catgtttcatctagggtttttAGAAGtGAAGTATAgtaaatttggttcgtaaataat...292...gagagaaaaatt	tatgcctt
P.Tro	ataat-aaa	gcaggaactttt...36...catgtttcatctagggtttttAGAAGtGAAGTATAgtaaatttggttcgtaaataat...292...gagagaaaaatt	tatgcctt
P.Abe	ataat-aaa	gcaggaactttt...36...catgtttcatctagggtttttAGAAGtGAAGTATAgtaaatttggttcgtaaataat...292...gagagaaaaatt	tatgcctt
C.Jac	ggaat-aaa	gcaggagctttt...36...catgtttcatctagggtttttAGAAGtGAAGTATAgtaaatttggttcgtaaataat...293...gagagaaaaatt	tatgcctt
M.Mus	ataat-aaa	acaggaactttt...36...catgtttcatctagggtttttAGAAGtGAAGTATAgtaaatttggttcgtaaataat...301...gagacaaaaatt	tatgcctt
R.Nor	ataat-aaa	acaggaactttt...36...catgtttcatctagggtttttAGAAGtGAAGTATAgtaaatttggttcgtaaataat...299...gagacaaaaatt	tatgcctt
C.Por	-taataaaa	gcaggagttttt...36...catgtttcatctagggtttttAGAAGtGAAGTATAgtaaatttggttcgtaaataat...296...gagagaaaaatt	tatgcctt
C.Fam	ataat-aaa	gcaggaactttt...36...catgtttcatctagggtttttAGAAGtGAAGTATAgtaaatttggttcgtaaataat...292...gagagaaaaact	tatgcctt
F.Cat	ataat-aaa	gcaggaactttt...36...catgtttcatctagggtttttAGAAGtGAAGTATAgtaaatttggttcgtaaataat...292...gagagaaaaact	tatgcctt
B.Tau	ataat-aaa	gcaggaactttt...36...catgtttcatctagggtttttAGAAGtGAAGTATAgtaaatttggttcgtaaataat...293...gagagaaaaatt	tatgcctt
E.Cab	ataat-aaa	gcaggaactttt...35...catgtttcatctagggtttttAGAAGtGAAGTATAgtaaatttggttcgtaaataat...294...gagagaaaaatt	catgcctt
S.Sus	ataat-aaa	gcaggaactttt...36...catgtttcatctagggtttttAGAAGtGAAGTATAgtaaatttggttcgtaaataat...293...gagagaaaagt	tatgcctt
L.Afr	ataat-aaa	gcaggaactttt...36...catgtttcatctagggtttttAGAAGtGAAGTATAgtaaatttggttcgtaaataat...293...gagagaaaaatt	tatgcctt
	*** **	***** **	*****

id=677051 gene=ENSG0000010244 name=ZNF207 segment=chr17_30696957_30697362.1 type=AN VIEW

Figure 573:



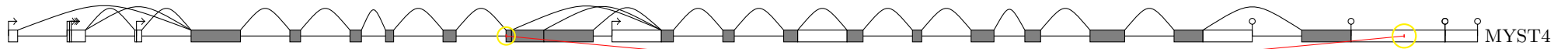
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R.Mac	ccacctgg	gtaagaaaattt...400...	atcacagttagat	TTGT	CATACAtt	TTCAcaG	ATTgcatc
P.Tro	ccacctgg	gtaagaaaattc...449...	atcacagttagat	TTGT	ATACAtt	TTCAcaG	ATTgcatc
P.Abe	ccacctgg	gtaagaaaattc...448...	atcacagttagat	TTGT	CATACAtt	TTCAcaG	ATTgcatc
C.Jac	ccacctgg	gtaagaaaatta...448...	atcacagttagat	TTGT	ATACAtt	TTCAcaG	ATTgcatc
M.Mus	cgcctgg	gtaagcaaactg...392...	atcacagttagat	TTGT	CATACAtt	TTCAcaG	ATTgcatc
R.Nor	ccacctgg	gtaagcaaactt...379...	atcacagttagat	TTGT	ATACAtt	TTCAcaG	ATTgcatc
C.Por	ccacctgg	gtaagaaaagctt...511...	atcacagttagat	TTGT	ATACAtt	TTCAcaG	ATTgcatc
O.Cun	ccccctgg	gtaagaaaactc...431...	atcacagttagat	TTGT	CATACAtt	TTCAcaG	ATTgcatc
C.Fam	ccacctgg	gtaagagaactt...455...	atcacagttagat	TTGT	ATACAtt	TTCAcaG	ATTgcatc
B.Tau	ccacctgg	gtaagaaaactc...461...	atcacagttagat	TTGT	CATACAtt	TTCAcaG	ATTgcatc
E.Cab	ccacctgg	gtaagaaaacac...450...	atcacagttagat	TTGT	ATACAtt	TTCAcaG	ATTgcatc
L.Afr	ccacctgg	gtaagaaaactc...443...	atcacagttagat	TTGT	CATACAtt	TTCAcaG	ATTgcatc
	** *****	***** *		*****	*****	*****	*****

id=677036 gene=ENSG0000010244 name=ZNF207 segment=chr17_30687987_30688486.1 type=IN

H.Sap	ataat-aaa	gcaggaactttt...242...	-ccaagt-acttg	acattgga	AGTCTGAATGTGT	ACAA	tatttaatg	tatttagagtt...82...	gagagaaaaatt	tatgcctt
R.Mac	ataat-aaa	gcaggaactttt...242...	-ccaagt-acttg	acattgga	AGTCTGAATGTGT	ACAA	tatttaatg	tatttagagtt...82...	gagagaaaaatt	tatgcctt
P.Tro	ataat-aaa	gcaggaactttt...242...	-ccaagt-acttg	acattgga	AGTCTGAATGTGT	ACAA	tatttaatg	tatttagagtt...82...	gagagaaaaatt	tatgcctt
P.Abe	ataat-aaa	gcaggaactttt...242...	-ccaagt-acttg	acattgga	AGTCTGAATGTGT	ACAA	tatttaatg	tatttagagtt...82...	gagagaaaaatt	tatgcctt
C.Jac	ggaat-aaa	gcaggagctttt...243...	-ccaagt-acttg	acattgga	AGTCTGAATGTGT	ACAA	tatttaatg	tatttagagtt...82...	gagagaaaaatt	tatgcctt
M.Mus	ataat-aaa	acaggaactttt...244...	-ccaagt-acttg	acattgga	AGTTTGAATGTGT	ACAA	tatttaatg	taattagagag...89...	gagacaaaaatt	tatgcctt
R.Nor	ataat-aaa	acaggaactttt...244...	-ccaagt-acttg	acattgga	AGTTTGAATGTGT	ACAA	tatttaatg	taattagagag...87...	gagacaaaaatt	tatgcctt
C.Por	-taataaaa	gcaggagttttt...244...	--caagtaacct	gtacattgga	AATCTGAATGTGT	ACAA	tatttaatg	tatttagagtt...84...	gagagaaaaatt	tatgcctt
O.Cun	ataat-aaa	gcaggaactttt...243...	-ccaagt-acctg	acattgga	AGTCTGAATGTGT	ACAA	tatttaatg	tatttagagtt...82...	gagagaaaaatt	catgcctt
C.Fam	ataat-aaa	gcaggaactttt...242...	tccaag--acctg	acattgga	AGTCTGAATGTAT	ACAA	tatttaatg	tatttagagtt...82...	gagagaaaaatt	tatgcctt
B.Tau	ataat-aaa	gcaggaactttt...243...	-ccaagt-acctg	acattgga	AGTCTGAATGTGT	ACAA	tatttaatg	tatttagagtt...82...	gagagaaaaatt	tatgcctt
E.Cab	ataat-aaa	gcaggaattttc...242...	-ccaagt-acctg	acattgga	AGTCTGAATGTGT	ACAA	tatttaatg	tatttagaatt...83...	gagagaaaaatt	catgcctt
L.Afr	ataat-aaa	gcaggaactttt...243...	-ccaagt-acctg	acattgga	AGTCTGAATGTGT	ACAA	tatttaatg	tatttagagct...82...	gagagaaaaatt	tatgcctt
	*** **	***** **	**** **	*****	*****	*****	*****	*****	*****	*****

id=677051 gene=ENSG0000010244 name=ZNF207 segment=chr17_30696957_30697362.1 type=AN VIEW

Figure 574: CS=3.9



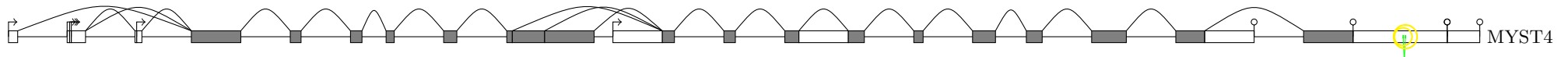
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R. Mac	cgattggt	gtagggtgagat-...2693...	taaatgctgatactattctc	TAAATTt	CTGCCtAG	GTctgtaa
P. Tro	cgattggt	gtagggtgagat-...2713...	taaatgctgatactattctc	TAAATTt	CTGCCtAG	GTctgtaa
P. Abe	cgattggt	gtagggtgagat-...2711...	taaatgctgatactattctc	TAAATTt	CTGCCtAG	GTctgtaa
C. Jac	cgattggt	gtagggtgagat-...2689...	taaatgctgatactattctc	TAAATTt	CTGCCtAG	GTctgtaa
M. Mus	cgattggt	gtagggtgagat-...2698...	ttaatgctgatactattctc	TAAATTCt	TGCCtAG	GTctgtaa
C. Por	cgattggt	gtagggtgagat-...2628...	taaatgctgatactattctc	TAAATTt	TGCCtAG	GTctgtaa
O. Cun	cgattggt	gtagggtgagat-...2734...	taattgctgatactattctc	TAAATTt	TGCCtAG	GTctgtaa
C. Fam	cgattggt	gtagggtgagat-...2729...	taaatgctgatactattctc	TAAATTt	TGCCtAG	GTctgtaa
F. Cat	cgattggt	gta-gttgagatc...3121...	taaatgctgatactattctc	TAAATTt	TGCCtAG	GTctgtaa
B. Tau	cgattggt	gtagggtgagat-...2869...	taaatgctgatactattctc	TAAATTt	TGCCtAG	GTctgtaa
E. Cab	cgattggt	gtagggtgagat-...2749...	taaatgctgatactattctc	TAAATTt	TGCCtAG	GTctgtaa
S. Sus	cgattggt	gtagggtgagat-...2796...	taaatgctgatactattctc	TAAATTt	TGCCtAG	GTctgtaa
L. Afr	cgattggt	gtagggtgagat-...3094...	taaatgctgatgctgttctc	TAAATTCt	TGCCtAG	GTctgtaa
	*****	*** *****	* * ***** ** *****	*****	*****	*****

id=344018 gene=ENSG00000156650 name=MYST4 segment=chr10.76732398_76735156_1 type=IN

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R. Mac	aaaaaaaa	gctgtatgcagc...644...	catttcatatatgtccaat	ACTTGGCAGGATTTA	-----	aaaaaaaaatagtgaatttgg--...380...	tgagccattttt	agcctctt
P. Tro	aaaaaaaa	gctgtatgcagc...643...	catttcatatatgtccaat	ACTTGGCAGGATTTA	-----	aaaaaaaaatagtgaatttgg--...380...	tgagccattttt	agcctctt
P. Abe	aaaaaaaa	gctgtatgcagc...643...	catttcatatatgtccaat	ACTTGGCAGGATTTA	-----	aaaaaaaaatagtgaatttgg--...380...	tgagccattttt	agcctctt
C. Jac	aaaaaaaa	gctgtatgcagc...654...	catttcatatatgtccaat	ACTTGGCAGGATTTA	-----	aaaaaaaaatagtgaatttgg--...381...	tgagccattttt	agcctctt
M. Mus	aaaaaaaa	gctgtatgcagc...652...	catttcatatatgtccaat	ACTTGGCAGGATTTA	-----	aaaaaaaaatagtgaatttgg--...387...	tgagccatttct	agcctctc
C. Por	aaaaaaaa	gctgtatgcagc...637...	catttcatatatgtccaat	ACTTGGCAGGATTTA	-----	aaaaaaaaatagtgaatttgg--...386...	tgagccattttt	agcctctt
O. Cun	aaaaaaaa	gctgtatgcagc...662...	catttcatatatgtccaat	ACTTGGCAGGATTTA	-----	aaaaaaaaatagtgaatttgg--...380...	tgagccattttt	agcctctt
C. Fam	aaaaaaaa	gctgtatgcagc...657...	catttcatatatgtccaat	ACTTGGCAGGATTTA	-----	aaaaaaaaatagtgaatttgg--...399...	tgagccattttt	agcctctt
F. Cat	aaaaaaaa	gctgtatgcagc...644...	catttcatatatgtccaat	ACTTGGCAGGATTTA	-----	aaaaaaaaatagtgaatttgg--...389...	tgagccattttt	agcctctt
B. Tau	aaaaaaaa	gctgtatgcagc...659...	catttcatatatgtccaat	ACTTGGCAGGATTTA	-----	aaaaaaaaatagtgaatttgg--...380...	tgagccattttt	agcctctt
E. Cab	aaaaaaaa	gctgtatgcagc...638...	catttcatatatgtccaat	ACTTGGCAGGATTTA	-----	aaaaaaaaatagtgaatttgg--...381...	tgagccattttt	agcctctt
S. Sus	aaaaaaaa	gctgtatgcagc...662...	catttcatatatgtccaat	ACTTGGCAGGATTTA	-----	aaaaaaaaatagtgaatttgg--...393...	tgagccattttt	agcctctt
L. Afr	aaaaaaaa	gctgtatgcagc...652...	catttcatatatgtccaat	ACTTGGCAGGATTTA	aaaaaaaaaaaaaatagtga	-----...393...	tgagccattttt	agcctctt
	*****	*****	***** *****	*****	*****	*****	*****	*****

id=344044 gene=ENSG00000156650 name=MYST4 segment=chr10.76790949_76792050_1 type=E3 VIEW

Figure 575: CS=8.4



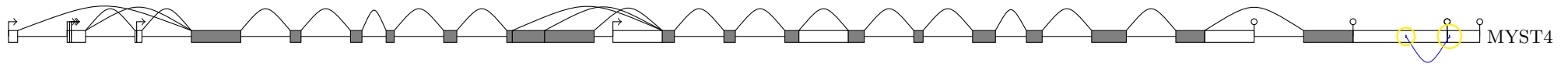
H.Sap	aaaaaaa	gctgtatgcagc...605...tgaagcatatctcagtgttt	ATCTGTCAGGTTTTGaaACAT	-----	ttcatatatgtccaataact----	...412...tgagccattttt	agcctctt									
R.Mac	aaaaaaa	gctgtatgcagc...606...tgaagcatatctcagtgttt	ATCTGTCAGGTTTTGaaACAT	-----	ttcatatatgtccaataact----	...412...tgagccattttt	agcctctt									
P.Tro	aaaaaaa	gctgtatgcagc...605...tgaagcatatctcagtgttt	ATCTGTCAGGTTTTGaaACAT	-----	ttcatatatgtccaataact----	...412...tgagccattttt	agcctctt									
P.Abe	aaaaaaa	gctgtatgcagc...605...tgaagcatatctcagtgttt	ATCTGTCAGGTTTTGaaACAT	ttCATGt	ATGTC	CAAA	ACTTGGC	GGAT	tt	taaaaaa	----	aaatagtg	gaatt...	383...	tgagccattttt	agcctctt
C.Jac	aaaaaaa	gctgtatgcagc...616...tgaagcatatctcagtgttt	ATCTGTCAGGTTTTGaaACAT	-----	ttcatatatgtccaataact----	...413...tgagccattttt	agcctctt									
M.Mus	aaaaaaa	gctgtatgcagc...685...taaaaaaaatagtgattt	GGTGTAAAGttGCTA	-----	ttttatgg	----	aaatgcctctaa...	354...	tgagccattttt	agcctctt						
C.Por	aaaaaaa	gctgtatgcagc...599...tgaagcatatctcagtgttt	ATCTGTCAGGTTTTGaaACAT	-----	ttcatatatgtccaataact----	...418...tgagccattttt	agcctctt									
O.Cun	aaaaaaa	gctgtatgcagc...624...tgaagcatatctcagtgttt	ATCTGTCAGGTTTTGaaACAT	-----	ttcatatatgtccaataact----	...412...tgagccattttt	agcctctt									
C.Fam	aaaaaaa	gctgtatgcagc...619...tgaagcatatctcagtgttt	ATCTGTCAGGTTTTGaaACAT	-----	ttcatatatgtccaataact----	...431...tgagccattttt	agcctctt									
F.Cat	aaaaaaa	gctgtatgcagc...606...tgaagcatatctcagtgttt	ATCTGTCAGGTTTTGaaACAT	-----	ttcatatatgtccaataact----	...421...tgagccattttt	agcctctt									
B.Tau	aaaaaaa	gctgtatgcagc...621...tgaagcatatctcagtgttt	ATCTGTCAGGTTTTGaaACAT	-----	ttcatatatgtccaataact----	...412...tgagccattttt	agcctctt									
E.Cab	aaaaaaa	gctgtatgcagc...600...tgaagcatatctcagtgttt	ATCTGTCAGGTTTTGaaACAT	-----	ttcatatatgtccaataact----	...413...tgagccattttt	agcctctt									
S.Sus	aaaaaaa	gctgtatgcagc...624...tgaagcatatctcagtgttt	ATCTGTCAGGTTTTGaaACAT	-----	ttcatatatgtccaataact----	...425...tgagccattttt	agcctctt									
L.Afr	aaaaaaa	gctgtatgcagc...614...tgaagcatatctcagtgttt	ATCTGTCAGGTTTTGaaACAT	-----	ttcatatatgtccaataact----	...425...tgagccattttt	agcctctt									
	*****	*****	* * * *	* **	*** * ** *	**	****	*****	*****							

id=344044 gene=ENSG00000156650 name=MYST4 segment=chr10.76790949_76792050.1 type=E3

H.Sap	aaaaaaa	gctgtatgcagc...633...ggttttgaacatttc	----	atat	-----	ATGTC	CAAA	ACTTGGC	GGAT	tt	taaaaaaa	aatagtg	gaatt--	...383...	tgagccattttt	agcctctt
R.Mac	aaaaaaa	gctgtatgcagc...634...ggttttgaacatttc	----	atat	-----	ATGTC	CAAA	ACTTGGC	GGAT	tt	taaaaaaa	aatagtg	gaatt--	...383...	tgagccattttt	agcctctt
P.Tro	aaaaaaa	gctgtatgcagc...633...ggttttgaacatttc	----	atat	-----	ATGTC	CAAA	ACTTGGC	GGAT	tt	taaaaaaa	aatagtg	gaatt--	...383...	tgagccattttt	agcctctt
P.Abe	aaaaaaa	gctgtatgcagc...605...tgaagcatatctcagtgttt	ATCTGTCAGGTTTTGaaACAT	ttCATGt	ATGTC	CAAA	ACTTGGC	GGAT	tt	taaaaaaa	aatagtg	gaatt--	...383...	tgagccattttt	agcctctt	
C.Jac	aaaaaaa	gctgtatgcagc...644...ggttttgaacatttc	----	atat	-----	ATGTC	CAAA	ACTTGGC	GGAT	tt	taaaaaaa	aatagtg	gaatt--	...384...	tgagccattttt	agcctctt
M.Mus	aaaaaaa	gctgtatgcagc...887...gtttctattgctcct	----	tttt	-----	TAGCCT	TTGTAC	-----	tg	gacaggtgacagtaagg	g--	...154...	tgagccattttt	agcctctt		
C.Por	aaaaaaa	gctgtatgcagc...627...ggttttgaacatttc	----	atat	-----	ATGTC	CAAA	ACTTGGC	GGAT	tt	aaaaaa	aatagtg	gaattg...	389...	tgagccattttt	agcctctt
O.Cun	aaaaaaa	gctgtatgcagc...652...ggttttgaacatttc	----	atat	-----	ATGTC	CAAA	ACTTGGC	GGAT	tt	aaaaaa	aatagtg	gaatt--	...383...	tgagccattttt	agcctctt
C.Fam	aaaaaaa	gctgtatgcagc...647...ggttttgaacatttc	----	atat	-----	ATGTC	CAAA	ACTTGGC	GGAT	tt	aaaaaa	aatagtg	gaatt--	...402...	tgagccattttt	agcctctt
F.Cat	aaaaaaa	gctgtatgcagc...634...ggttttgaacatttc	----	atat	-----	ATGTC	CAAA	ACTTGGC	GGAT	tt	aaaaaa	aatagtg	gaatt--	...392...	tgagccattttt	agcctctt
B.Tau	aaaaaaa	gctgtatgcagc...649...ggttttgaacatttc	----	atat	-----	ATGTC	CAAA	ACTTGGC	GGAT	tt	aaaaaa	aatagtg	gaattg...	383...	tgagccattttt	agcctctt
E.Cab	aaaaaaa	gctgtatgcagc...628...ggttttgaacatttc	----	atat	-----	ATGTC	CAAA	ACTTGGC	GGAT	tt	aaaaaa	aatagtg	gaatt--	...384...	tgagccattttt	agcctctt
S.Sus	aaaaaaa	gctgtatgcagc...652...ggttttgaacatttc	----	atat	-----	ATGTC	CAAA	ACTTGGC	GGAT	tt	aaaaaa	aatagtg	gaatt--	...396...	tgagccattttt	agcctctt
L.Afr	aaaaaaa	gctgtatgcagc...642...ggttttgaacatttc	----	atat	-----	ATGTC	CAAA	ACTTGGC	GGAT	tt	aaaaaa	aatagtg	gaatt--	...396...	tgagccattttt	agcctctt
	*****	*****	* * *	* *		* * **		* * * *			*****	*	*****			

id=344044 gene=ENSG00000156650 name=MYST4 segment=chr10.76790949_76792050.1 type=E3 VIEW

Figure 576:



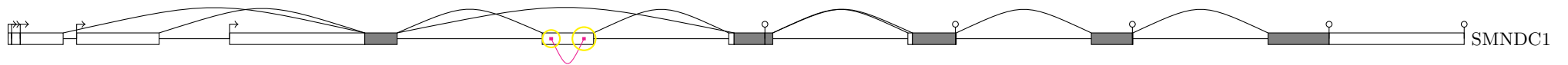
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R.Mac	aaaaaaa	gctgtatgcagc...641...aacatttcatatatgtcca	AATAct	TGGCAGGAT	ttaaaaaaaaaatagtgatt--...383...tgagccattttt	agcctctt
P.Tro	aaaaaaa	gctgtatgcagc...640...aacatttcatatatgtcca	AATAct	TGGCAGGAT	ttaaaaaaaaaatagtgatt--...383...tgagccattttt	agcctctt
P.Abe	aaaaaaa	gctgtatgcagc...640...aacatttcatatatgtcca	AATAct	TGGCAGGAT	ttaaaaaaaaaatagtgatt--...383...tgagccattttt	agcctctt
C.Jac	aaaaaaa	gctgtatgcagc...651...aacatttcatatatgtcca	AATAct	TGGCAGGAT	ttaaaaaaaaaatagtgatt--...384...tgagccattttt	agcctctt
C.Por	aaaaaaa	gctgtatgcagc...634...aacatttcatatatgtcca	AATAct	TGGCAGGAT	tt-aaaaaaaaatagtgatttg...389...tgagccattttt	agcctctt
O.Cun	aaaaaaa	gctgtatgcagc...659...aacatttcatatatgtcca	AATAct	TGGCAGGAT	tt-aaaaaaaaatagtgattt...383...tgagccattttt	agcctctt
C.Fam	aaaaaaa	gctgtatgcagc...654...aacatttcatatatgtcca	AATAct	TGGCAGGAT	tt-aaaaaaaaatagtgattt...402...tgagccattttt	agcctctt
F.Cat	aaaaaaa	gctgtatgcagc...641...aacatttcatatatgtcca	AATAct	TGGCAGGAT	tt-aaaaaaaaaatagtgatt--...392...tgagccattttt	agcctctt
B.Tau	aaaaaaa	gctgtatgcagc...656...aacatttcatatatgtcca	AATAct	TGGCAGGAT	tt-aaaaaaaaatagtgatttg...383...tgagccattttt	agcctctt
E.Cab	aaaaaaa	gctgtatgcagc...635...aacatttcatatatgtcca	AATAct	TGGCAGGAT	tt-aaaaaaaaatagtgattt...384...tgagccattttt	agcctctt
S.Sus	aaaaaaa	gctgtatgcagc...659...aacatttcatatatgtcca	AATAct	TGGCAGGAT	ttaaaaaaaaaatagtgatt--...396...tgagccattttt	agcctctt
L.Afr	aaaaaaa	gctgtatgcagc...649...aacatttcatatatgtcca	AATAct	TGGCAGGAT	ttaaaaaaaaaaaatagtgatt--...396...tgagccattttt	agcctctt
*****	*****	*****	*****	*****	***** * * *	*****

id=344044 gene=ENSG00000156650 name=MYST4 segment=chr10.76790949_76792050_1 type=E3

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R.Mac	cattttt	a	gcctcttgt	GTCCTGTCATATT	atgattgatagagaatgacc...275...aattgtttttt	tcttttgg
P.Tro	cattttt	a	gcctcttgt	GTCCTGTCATATT	atgattgatagagaatgacc...275...aattgtttttt	tcttttgg
P.Abe	cattttt	a	gcctcttgt	GTCCTGTCATATT	atgattgatagagaatgacc...275...aattgtttttt	tcttttgg
C.Jac	cattttt	a	gcctcttgt	GTCCTGTCATATT	atgattgatagagaatgacc...276...aattgtttttt	tcttttgg
C.Por	cattttt	a	gcctcttgt	GTCCTGTCATATT	atgattgatagagaatgacc...275...aattgtttttt	tcttttgg
O.Cun	cattttt	a	gcctcttgt	GTCCTGTCATATT	atgattgatagagaatgacc...277...atttgtttttt	tcttttgg
C.Fam	cattttt	a	gcctcttgt	GTCCTGTCATATT	atgattgatagagaatgacc...278...aattgtttttt	tcttttgg
F.Cat	cattttt	a	gcctcttgt	GTCCTGTCATATT	atgattgatagagaatgacc...276...aattgtttttt	tcttttgg
B.Tau	cattttt	a	gcctcttgt	GTCCTGTCATATT	atgattgatagagaatgacc...277...aattgtttttt	tcttttgg
E.Cab	cattttt	a	gcctcttgt	GTCCTGTCATATT	atgattgatagagaatgacc...276...aattgtttttt	tcttttgg
S.Sus	cattttt	a	gcctcttgt	GTCCTGTCATATT	atgattgatagagaatgacc...277...aattgtttttt	tcttttgg
L.Afr	cattttt	a	gcctcttgt	GTCCTGTCATATT	atcattgatagagaatgacc...279...aattgtttttt	tcttttgg
*****	*	*****	*****	*****	* * *****	*****

id=344046 gene=ENSG00000156650 name=MYST4 segment=chr10.76792052_76792380_1 type=E3 VIEW

Figure 577:



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R.Mac	tattacag	tggctctctgcatccccGAAAGgcCTTCcTTCAgtaagcagagtgcttgagtg-----...125...aagtaattaatg	gtatgtac
P.Tro	tattacag	tggctctctgcatccccGAAAGgcCTTCcTTCAgtaagcagagtgcttgagtg-----...125...aagtaattaatg	gtatgtac
C.Jac	tattacag	tggctctctgcatccccGAAAGgcCTTCcTTCAgtaagcagagtgcttgagtg-----...125...aagtaattaatg	gtatgtac
M.Mus	tattacag	tggctctctgcatccccGAAAGgcCTTCcTTCAgtaagcagagtgcttgagtg-----...119...aagtaattaatg	gtatgtac
R.Nor	tattacag	tggctctctgcatccccGAAAGgcCTTCcTTCAgtaagcagagtgcttgagtg-----...125...aagtaattaatg	gtatgtac
C.Por	tattacag	tggctctctgcatccccGAAAGgcCTTCcTTCAgtaagcagagtgcttgagtg-----...125...aagtaattaatg	gtatgtac
O.Cun	tattacag	tggctctctgcatccccGAAAGgcCTTCcTTCAgtaagcagagtgcacccctt...116...aagtaattaatg	gtatgtac
C.Fam	tattacag	tggctctctgcatccccGAAAGgcCTTCcTTCAgtaagcagagtgcttgagtg-----...123...aagtaattaatg	gtatgtac
F.Cat	tattacag	tggctctctgcatccccGAAAGgcCTTCcTTCAgtaagcagagtgcttgagtg-----...123...aagtaattaatg	gtatgtac
B.Tau	tattacag	tggctctctgcatccccGAAAGgcCTTCcTTCAgtaagcagagtgcttgagtg-----...125...aagtaattaatg	gtatgtac
S.Sus	tattacag	tggctctctgcatccccGAAAGgcCTTCcTTCAgtaagcagagtgcttgagtg-----...125...aagtaattaatg	gtatgtac
O.Avi	tattacag	tggctctctgcatccccGAAAGgcCTTCcTTCAgtaagcagagtgcttgagtg-----...125...aagtaattaatg	gtatgtac
L.Afr	tattacag	tggctctctgcatccccGAAAGgcCTTCcTTCAgtaagcagagtgcttgagtg-----...125...aagtaattaatg	gtatgtac

***** ** ***** **

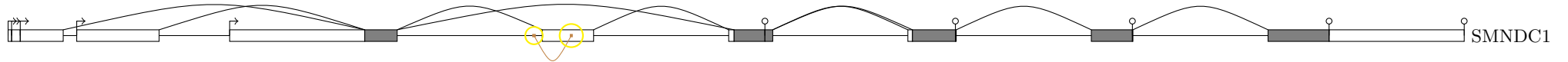
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R.Mac	tattacag	tggctctctgca...108...-----aactgctgccatctgtcgaTGAAGGAGcaGTTTCagaactcagacttgaggaggaaaagtaattaatg	gtatgtac
P.Tro	tattacag	tggctctctgca...108...-----aactgctgccatctgtcgaTGAAGGAGcaGTTTCagaactcagacttgaggaggaaaagtaattaatg	gtatgtac
C.Jac	tattacag	tggctctctgca...108...-----aactgctgccatctgtcgaTGAAGGAGcaGTTTCagaactcagacttgaggaggaaaagtaattaatg	gtatgtac
M.Mus	tattacag	tggctctctgca...108...-----aactgctgccatctgtcaaTGAAGGAGcaGTTTCagaac-----ttggggaggaaaagtaattaatg	gtatgtac
R.Nor	tattacag	tggctctctgca...108...-----aactgctgccatctgtcagTGAAGGAGcaGTTTCagaactcagacttggggaggaaaagtaattaatg	gtatgtac
C.Por	tattacag	tggctctctgca...108...-----aactgctgccatctgtcaaTGAAGGAGcaGTTTCagaactcagacttggggaggaaaagtaattaatg	gtatgtac
O.Cun	tattacag	tggctctctgca...100...attactgtaactgctgcccaTCTGTcATTGAAGGAGcaGTTTCagaactcagacttggggaggaaaagtaattaatg	gtatgtac
C.Fam	tattacag	tggctctctgca...106...-----aactgctgccatctgtcgaTGAAGGAGcaGTTTCagaactcagacttggggaggaaaagtaattaatg	gtatgtac
F.Cat	tattacag	tggctctctgca...106...-----aactgctgccatctgtcgaTGAAGGAGcaGTTTCagaactcagacttggggaggaaaagtaattaatg	gtatgtac
B.Tau	tattacag	tggctctctgca...108...-----aactgctgccatctgtcaaTGAAGGAGcaGTTTCagaactcagacttggggaggaaaagtaattaatg	gtatgtac
S.Sus	tattacag	tggctctctgca...108...-----aactgctgccatctgtcaaTGAAGGAGcaGTTTCagaactcagacttggggaggaaaagtaattaatg	gtatgtac
O.Avi	tattacag	tggctctctgca...108...-----aactgctgccatctgtcaaTGAAGGAGcaGTTTCagaactcagacttggggaggaaaagtaattaatg	gtatgtac
L.Afr	tattacag	tggctctctgca...108...-----aactgctgccatctgtcaaTGAAGGAGcaGTTTCagaactcagacttggggaggaaaagtaattaatg	gtatgtac

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Figure 578:



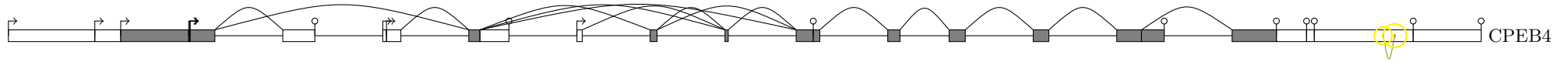
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R. Mac	atttaca	gtaagtatgggt...2636...-----ggctgttttgctg-aataagc	TGGTTCTaaAGGA-GGCAGGGGT	caagtcacttgtctca-tatattacag	tggctctc
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P. Abe	atttaca	gtaagtatgggt...2713...-----gctgttttgctgaataagc	TGGTTCTaaAGGA-GGCAGGGGT	caagtcacttgtctcattatattacag	tggctctc
C. Jac	atttaca	gtaagtatgggt...2714...aggcaggggtcaagtcactt-----	GTCTcATATATcaCAGTGG-----	-----	-----ctctc
M. Mus	atttgcaa	gtaagtacaggt...2666...-----ggctgtattgctg-aataaac	TGGTTCTaaAGGA-GGCAGGGGT	caagtcacttgtctca-tatattacag	tggctctc
R. Nor	atttgcaa	gtaagtataggt...2910...-----ggctgtattgctg-aataaac	TGGTTCTaaAGGA-GGCAGGGGT	caagtcacttgtctca-tatattacag	tggctctc
C. Por	atttaca	gtaagtatagat...2513...aggcaggggtcaagtcactt-----	GTCTcATATATcaCAGTGG-----	-----	-----ctctc
O. Cun	atttaca	gtaagtatgggt...2497...-----ggctgttttgctg-aataaac	TGGTTCTaaAGGA-GGCAGGGGT	caagtcacttgtctca-tatattacag	tggctctc
C. Fam	acttacag	gtaagtataaga...2605...-----ggctgttttgctg-aataaac	TGGTTCTaaAGGA-GGCAGGGGT	caagtcacttgtctca-tatattacag	tggctctc
F. Cat	atttaca	gtaagtatcaga...2990...-----ggctgttttgctg-aataaac	TGGTTCTaaAGGA-GGCAGGGGT	caagtcacttgtctca-tatattacag	tggctctc
B. Tau	atttaca	gtaagtatgggg...2601...-----ggctgttttgctg-aataaac	TGGTTCTaaAGGA-GGCAGGGGT	caagtcacttgtctca-tatattacag	tggctctc
S. Sus	atttacag	gtaagtaagagg...3140...aggcaggggtcaagtcactt-----	GTCTcATATATcaCAGTGG-----	-----	-----ctctc
O. Avi	atttaca	gtaagtatgggg...2632...aggcaggggtcaagtcactt-----	GTCTcATATATcaCAGTGG-----	-----	-----ctctc
L. Afr	atttacag	gtaagtatggag...2923...aggcaggggtcaagtcactt-----	GTCTcATATATcaCAGTGG-----	-----	-----ctctc
		* * * *	*****	* * * *	*****

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R. Mac	tattacag	tggctctctgca...56...gctgata-tgtagatcac-----aacACCTga	TGCTTCCTGGAATTG	ccga-ttactgtaactgctgc...49...aagtaattaatg	gtaggtac
P. Tro	tattacag	tggctctctgca...56...gctgata-tgtagatcac-----aacACCTga	TGCTTCCTGGAATTG	ccga-ttactgtaactgctgc...49...aagtaattaatg	gtaggtac
P. Abe	tattacag	tggctctctgca...60...-ctgatattgtagatcac-----aacACCTga	TGCTTCCTGGAATTG	ccgacttctgtcctctgctg-...52...aagtaattaatg	gtaggtac
C. Jac	tattacag	tggctctctgca...34...-----ttgagtgacccccctttgac--	CTGCTGATATGTAGAT	---cacaacacctgatgcttct-...76...aagtaattaatg	gtaggtac
M. Mus	tattacag	tggctctctgca...56...gctgata-tgtagatcac-----aacATCTga	TGCTTCCTGGAATTG	ccga-ttactgtaactgctgc...43...aagtaattaatg	gtaggtac
R. Nor	tattacag	tggctctctgca...56...gctgata-tgtagatcac-----aacATCTga	TGCTTCCTGGAATTG	ccga-ttactgtaactgctgc...49...aagtaattaatg	gtaggtac
C. Por	tattacag	tggctctctgca...34...-----ttgagtgacccccctttgac--	CTGCTGATATGTAGAT	---cacaacacctgatgcttct-...76...aagtaattaatg	gtaggtac
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F. Cat	tattacag	tggctctctgca...54...gctgata-tgtagatcac-----aacATCTga	TGCTTCCTGGAATTG	ccga-ttactgtaactgctgc...49...aagtaattaatg	gtaggtac
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Figure 579: CS=9



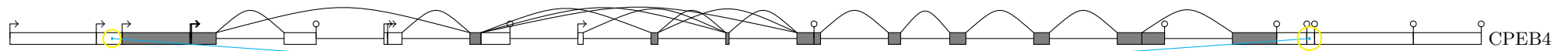
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P. Tro	tataagaa	tacttttattaa...3533...ttgtagtatttattatagca	TTTAAAtAAGGGtAATT	ca-tttttattaaagtcatt...189...ctttaactcag	atttcctt
P. Abe	tataagaa	tacttttattaa...3535...ttgtagtatttattatagca	TTTAAAtAAGGGtAATT	ca-tttttattaaagtcatt...189...ctttaactcag	atttcctt
C. Jac	tataagaa	tacttttattaa...3517...ttgtagtatttattatagca	TTTAAAtAAGGGtAATT	ca-tttttattaaagtcatt...189...ctttaactcag	atttcctt
R. Nor	tataagaa	aactttactgcg...3425...ttgtagtatttattctagca	TTTAAAtAAGGGtAATT	cattttttattaaagtcatt...190...ctttaactcag	atttcctt
C. Por	tatgagaa	tacttttattga...3420...ttgtagtatttattatagca	TTTAAAtAAGGGtAATT	cattttttattaaagtcatt...190...ctttaactcag	atttcctt
O. Cun	tataagaa	tacttttattaa...3519...ttgtagtatttattatagca	TTTAAAtAAGGGtAATT	ca-tttttattaaagtcatt...190...ctttaactcag	atttattt
C. Fam	tataagaa	tacttttattaa...3543...ttgtagtatttattatagca	TTTAAAtAAGGGtAATT	ca-tttttattaaagtcatt...189...ctttaactcag	ctttcctt
B. Tau	gataagaa	tacttttattaa...3523...ttgtagtatttattatagca	TTTAAAtAAGGGtAATT	ca-tttttattaaagtcatt...189...ctttaactcag	ctttcctt
E. Cab	tataagac	tacttttattga...3544...ttgtagtatttattatagca	TTTAAAtAAGGGtAATT	ca-tttttattaaagtcatt...189...ctttaactcag	ctttcctt
S. Sus	gataagaa	tacttttattaa...3544...ttgtagtatttattatagca	TTTAAAtAAGGGtAATT	ca-tttttattaaagtcatt...190...ctttaactcag	ctttcctt
O. Avi	gataagaa	tacttttattaa...3522...ttgtagtatttattatagca	TTTAAAtAAGGGtAATT	ca-tttttattaaagtcatt...189...ctttaactcag	ctttcctt
L. Afr	tataagaa	tacttttattaa...3538...ttgtagtatttattatagca	TTTAAAtAAGGGtAATT	ca-tttttattaaagtcatt...189...ctttaactcag	atttcctt
	** **	**** *	*****	*****	*** **

id=281770 gene=ENSG00000113742 name=CPEB4 segment=chr5_173383518_173387312.1 type=E3

H. Sap	tataagaa	tacttttattaa...3613...actcctaagttatataaacac	AGTTCCTT-TTTAAAA	-gagttcatttgttgaagtc...102...ctttaactcag	atttcctt
P. Tro	tataagaa	tacttttattaa...3622...actcctaagttatataaacac	AGTTCCTT-TTTAAAA	-gagttcatttgttgaagtc...102...ctttaactcag	atttcctt
P. Abe	tataagaa	tacttttattaa...3624...actcctaagttatataaacac	AGTTCCTT-TTTAAAA	-gagttcatttgttgaagtc...102...ctttaactcag	atttcctt
C. Jac	tataagaa	tacttttattaa...3606...actcctaagttatataaacac	AGTTCCTT-TTTAAAA	-gagttcatttgttgaagtc...102...ctttaactcag	atttcctt
R. Nor	tataagaa	aactttactgcg...3515...actcctaagttatataaacac	AGTTCCTT-TTTAAAA	-gagttcatttgttgaagtc...102...ctttaactcag	atttcctt
C. Por	tatgagaa	tacttttattga...3510...actcctaagttatataaacac	AGTTCCTT-TTTAAAA	-gagttcatttgttgaagtc...102...ctttaactcag	atttcctt
O. Cun	tataagaa	tacttttattaa...3608...actcctaagttatataaacac	AGTTCCTT-TTTAAAA	-gagttcatttgttgaagtc...102...ctttaactcag	atttattt
C. Fam	tataagaa	tacttttattaa...3632...actcctaagttatataaacac	AGTTCCTT-TTTAAAA	-gagttcatttgttgaagtc...102...ctttaactcag	ctttcctt
B. Tau	gataagaa	tacttttattaa...3612...actcctaagttatataaacac	AGTTCCTT-TTTAAAA	-gagttcatttgttgaagtc...102...ctttaactcag	ctttcctt
E. Cab	tataagac	tacttttattga...3633...actcctaagttatataaacac	AGTTCCTT-TTTAAAA	-gagttcatttgttgaagtc...102...ctttaactcag	ctttcctt
S. Sus	gataagaa	tacttttattaa...3633...actcctaagttatataaacac	AGTTCCTT-TTTAAAA	-gagttcatttgttgaagtc...103...ctttaactcag	ctttcctt
O. Avi	gataagaa	tacttttattaa...3611...actcctaagttatataaacac	AGTTCCTT-TTTAAAA	-gagttcatttgttgaagtc...102...ctttaactcag	ctttcctt
L. Afr	tataagaa	tacttttattaa...3627...actcctaagttatataaacac	AGTTCCTT-TTTAAAA	-gagttcatttgttgaagtc...102...ctttaactcag	atttcctt
	** **	**** *	*****	*****	*** **

id=281770 gene=ENSG00000113742 name=CPEB4 segment=chr5_173383518_173387312.1 type=E3 VIEW

Figure 580:



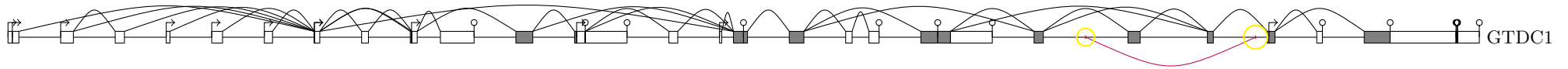
H.Sap	tattttta	ctccgcgcaagg...71...aagaaagcgctattttact	AACCAAAGACTT	gattt-ttaccctcttcattt...44...ttaaagagattt	ttttaaga
R.Mac	tattttta	ctccgcgcaagg...71...aagaaagcgctattttact	AACCAAAGACTT	gattt-ttaccctcttcattt...44...ttaaagagattt	ttttgagt
P.Tro	tattttta	ctccgcgcaagg...71...aagaaagcgctattttact	AACCAAAGACTT	gattt-ttaccctcttcattt...44...ttaaagagattt	ttttaaga
P.Abe	tattttta	ctccgcgcaagg...71...aagaaagcgctattttact	AACCAAAGACTT	gattt-ttaccctcttcattt...44...ttaaagagattt	ttttaaga
C.Jac	tattttta	ctccgtgcaagg...71...aagaaagcgctattttact	AACCAAAGACTT	gattt-ttaccctcttcgttt...44...ttaaagagattt	ttttagag
C.Por	tattttta	ttccgcacaatg...70...aagaaagcgctattttact	AACCAAAGACTT	gattt-ttaccctcttcgttt...44...ttaaagacattt	tttttttc
O.Cun	tattttta	ctctgctcaatg...71...aagaaagcgctattttact	AACCAAAGACTT	gattt-ttaccctcttcattt...44...ttaaagaaattt	tttttttt
C.Fam	tattttta	ctccgcgcaatg...71...aagaaagcgctattttact	AACCAAAGACTT	gattt-ttaccctcttcgttt...44...ttaaagattttt	tgtttggt
F.Cat	tattttta	ctccgcgcaagg...71...aagaaagcgctattttact	AACCAAAGACTT	gattt-ttaccctcttcgttt...57...ttttttttttt	tttttttag
B.Tau	tattttta	ctcctcgcaatg...71...aagaaagcgctattttact	AACCAAAGACTT	gattt-ttaccctcttcgttt...44...ttaaaggtttt	tttttagt
E.Cab	tattttta	ctccgcgcaatg...71...aagaaagcgctattttact	AACCAAAGACTT	gattt-ttaccctcttcattt...44...ttaaagagattt	tttttttt
S.Sus	tattttta	ctctgcaatg...71...aagaaagcgctattttact	AACCAAAGACTT	gattt-ttaccctcttcattt...45...ttaaagattttt	ctttaggg
O.Avi	atttttta	ctcctcgcaatg...71...aagaaagcgctattttact	AACCAAAGACTT	gattt-ttaccctcttcgttt...52...tgctttttttt	ttttaagt
L.Afr	tattttta	ctcgcgcaatg...71...aagaaagcgctattttact	AACCAAAGACTT	gattt-ttaccctcttcattt...44...ttaaagagattt	tttttaggt
	*****	* **	*****	** * ** * **	* *** **

id=281735 gene=ENSG00000113742 name=CPEB4 segment=chr5_173316343_173316533.1 type=E5

H.Sap	aaatgaaa	caataGAGTaTTTT-gGGTT	ttaattaaatta-ttgtaataataataacatataagaa	tactttta
R.Mac	aaatgaaa	caataGAGTaTTTT-gGGTT	ttaattaaatta-ttgtaataataataacatataagaa	tactttta
P.Tro	aaatgaaa	caataGAGTaTTTT-gGGTT	ttaattaaatta-ttgtaataataataacatataagaa	tactttta
P.Abe	aaatgaaa	caataGAGTaTTTT-gGGTT	ttaattaaatta-ttgtaataataataacatataagaa	tactttta
C.Jac	aaataaaa	caataGAGTaTTTT-gGGTT	ttaattaaatta-ttgtaataataataacatataagaa	tactttta
C.Por	aaatgaaa	caataGAGTaTTTT-gGGTT	ttaattaaatta-ttgtaataataataacatataagaa	tactttta
O.Cun	aaattaaa	caataGAGTaTTTT-gGGTT	ttaattaaatta-ttgtaataataataacatataagaa	tactttta
C.Fam	aaatgaaa	caataGAGTaTTTT-gGGTT	ttaattaaatta-ttgtaataataataacatataagaa	tactttta
F.Cat	aatgaaaa	caataGAGTaTTTT-gGGTT	ttaattaaattatttgtaataataataacatataagaa	tactttat
B.Tau	aaatgaaa	caataGAGTaTTTT-gGGTT	ttaattaaatta-ttggtgataataataacagataagaa	tactttta
E.Cab	aaatgaaa	caataGAGTaTTTT-gGGTT	ttaattaaatta-ttgtaataataataacatataagac	tactttta
S.Sus	aaatgaaa	caataGAGTaTTTTggGGTT	ttaattaaatga-ttat--taataataacagataagaa	tactttta
O.Avi	aaatgaaa	caataGAGTaTTTT-gGGTT	ttaattaaatta-ttggtgataataataacagataagaa	tactttta
L.Afr	aaatgaaa	caataGAGTaTTTT-gGGTT	ttaattaaatta-ttgtaataataataacatataagaa	tactttta
	** ***	*****	*****	** * ***** ** ***

id=281769 gene=ENSG00000113742 name=CPEB4 segment=chr5_173383461_173383517.1 type=EN VIEW

Figure 582:



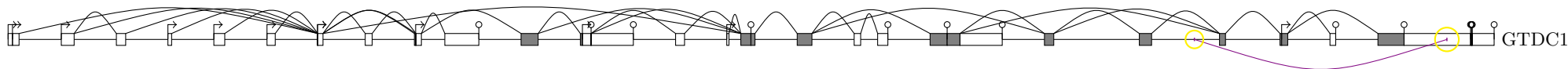
H. Sap	tgtcccag	gtacctctgttg...4555...	aatgcagtc	ccgtcattagga	ATCTTAGC	TCAC	tgcaatgccat	ttttgggtg...356...	tgtttttaaaag	atattttt
R. Mac	tgtcccag	gtacctctgttg...4555...	aatgcagtc	ccgtcattagga	ATCTTAGC	TCAC	tgcaatgccat	ttttgggtg...356...	tgtttttaaaag	atattttt
P. Tro	tgtcccag	gtacctctgttg...4555...	aatgcagtc	ccgtcattagga	ATCTTAGC	TCAC	tgcaatgccat	ttttgggtg...356...	tgtttttaaaag	atattttt
P. Abe	tgtcccag	gtacctctgttg...4555...	aatgcagtc	ccgtcattagga	ATCTTAGC	TCAC	tgcaatgccat	ttttgggtg...356...	tgtttttaaaag	atattttt
C. Jac	tgtcccag	gtacctctgttg...4555...	aatgcagtc	ccgtcattagga	ATCTTAGC	TCAC	tgcaatgccat	ttttgggtg...356...	tgtttttaaaag	atattttt
M. Mus	cacaccag	gtacctattttg...4556...	aatgcagtc	ccgtcattagga	ATCTTAGC	TCAC	tgcaatgccat	ttttgggtg...355...	ttccttaacag	atatattt
R. Nor	tgtaccag	gtacctgttttt...4556...	aatgcagtc	ccgtcattagga	ATCTTAGC	TCAC	tgcaatgccat	ttttgggtg...355...	ttccttaacag	atatattt
C. Por	tgttccag	gtacctctctg...4555...	aatgcagtc	ccgtcattagga	ATCTTAGC	TCAC	tgcaatgccat	ttttgggtg...356...	tatttttaaaag	gtatattt
C. Fam	tgtcccag	gtatctcttttg...4555...	aatgcagtc	ccgtcattagga	ATCTTAGC	TCAC	tgcaatgccat	ttttgggtg...356...	cgtttttaaaag	atgtattt
F. Cat	tgtcccag	gtatctcttttg...4555...	aatgcagtc	ccgtcattagga	ATCTTAGC	TCAC	tgcaatgccat	ttttgggtg...356...	cgtttttaaaag	atgtattt
B. Tau	tgtcccag	gtatctctcttg...4555...	aatgcagtc	ccgtcattagga	ATCTTAGC	TCAC	tgcaatgccat	ttttgggtg...356...	cgtttttaaaag	atatattt
E. Cab	tgtcccag	gtatctctttta...4555...	aatgcagtc	ccgtcattagga	ATCTTAGC	TCAC	tgcaatgccat	ttttgggtg...356...	cgtttttaaaag	atgtattt
S. Sus	tgtcccag	gtacctcttttg...4555...	aatgcagtc	ccgtcattagga	ATCTTAGC	TCAC	tgcaatgccat	ttttgggtg...356...	tgtttttaaaag	atatattt
L. Afr	tgtcccag	gtatctcttttg...4555...	aatgcagtc	ccgtcattagga	ATCTTAGC	TCAC	tgcaatgccat	ttttgggtg...356...	ccttttaaaag	atatattt
	****	*** ** *		*****				*****	**	* * **

id=768211 gene=ENSG00000121964 name=GTDC1 segment=chr2.144714907_144728219_-1 type=IN

H. Sap	atttccag	gtagctgcttta...514...	atntagcatta	aacatcctt	GTGAGCTGAGGT	aaccttata	aaaatcatgctt...109...	ttttcctgcag	ctgaatat
R. Mac	atttccag	gtagctgcttta...501...	atntagcatta	aacatcctt	GTGAGCTGAGGT	aaccttata	aaaatcatgctt...109...	ttttcctgcag	ctgaatat
P. Tro	atttccag	gtagctgcttta...510...	atntagcatta	aacatcctt	GTGAGCTGAGGT	aaccttata	aaaatcatgctt...109...	ttttcctgcag	ctgaatat
P. Abe	atttccag	gtagctgcttta...515...	atntagcatta	aacatcctt	GTGAGCTGAGGT	aaccttata	aaaatcatgctt...109...	ttttcctgcag	ctgaatat
C. Jac	atttccag	gtagttgcctta...517...	atntagcatta	aacatcctt	GTGAGCTGAGGT	aaccttata	aaaatcatgctt...109...	ttttcctgcag	ctgaatat
M. Mus	ctttccag	gtagctgctttc...517...	atntagcatta	aacatcctt	GTGAGCTGAGGT	aaccttata	aaaatcatgctt...109...	ttttcctgcag	ctgagtat
R. Nor	ctttccag	gtagccgctttc...515...	atntagcatta	aacatcctt	GTGAGCTGAGGT	aaccttata	aaaatcatgctt...109...	ttttcctgcag	ctgagtat
C. Por	atttccag	gtagctgctgta...517...	atntagcatta	aacatcctt	GTGAGCTGAGGT	aaccttata	aaaatcatgctt...109...	ttttcctgcag	ctgaatat
C. Fam	atttccag	gtagctgcttta...520...	atntagcatta	aacatcctt	GTGAGCTGAGGT	aaccttata	aaaatcatgctt...109...	ttttcctgcag	ctgaatat
F. Cat	atttccag	gtagcctcttga...517...	atntagcatta	agcatcctt	GTGAGCTGAGGT	aaccttata	aaaatcatgctt...109...	ttttcctgcag	ctgaatat
B. Tau	atttccag	gtagctgcttta...517...	atntagcatta	aacatcctt	GTGAGCTGAGGT	aaccttata	aaaatcatgctt...109...	ttttcctgcag	ctgagtat
E. Cab	atttccag	gtagctgcttta...517...	atntagcatta	aacatcctt	GTGAGCTGAGGT	aaccttata	aaaatcatgctt...107...	ttttcctacag	ctgaatat
S. Sus	atttccag	gtagctgcttta...521...	atntagcatta	aacatcctt	GTGAGCTGAGGT	aaccttata	aaaatcatgctt...109...	ttttcctgcag	ctgaatat
L. Afr	atttccag	gtagctgcttta...516...	atntagcatta	aacatcctt	GTGAGCTGAGGT	aaccttata	aaaatcatgctt...109...	ttttcctgcag	ccgaatat
	** ****	**** *		*****				*****	** ** **

id=768215 gene=ENSG00000121964 name=GTDC1 segment=chr2.144709641_144710339_-1 type=IN VIEW

Figure 583:



H. Sap	gtggcaat	gtaagttctttc...4005...tgtccatactttaccatgt-t	GTTACAtg	TGTTTATCTg	CGATT	ataaaatgtgttaaacagta--...258...aaat	tttcttag	gttggaag
R. Mac	gtggcaat	gtaagttctttc...4000...tgtccatactttaccatgt-t	GTTACAtg	TGTTTATCTg	CGATT	ataaaatgtgttaaacagta--...259...aaat	tttcttag	gttggaag
P. Tro	gtggcaat	gtaagttctttc...4006...tgtccatactttaccatgt-t	GTTACAtg	TGTTTATCTg	CGATT	ataaaatgtgttaaacagta--...259...aaat	tttcttag	gttggaag
P. Abe	gtggcaat	gtaagttctttc...4000...tgtccatactttaccatgt-t	GTTACAtg	TGTTTATCTg	CGATT	ataaaatgtgttaaacagta--...258...aaat	tttcttag	gttggaag
C. Jac	gtggcaat	gtaagtcctttc...4011...tgtccatactttaccatgt-t	GTTACAtg	TGTTTATCTg	CGATT	ataaaatgtgttaaacagta--...259...aaat	tttcttag	gttggaag
R. Nor	gtagcaat	gtaagtccttccc...3788...tc-ccatgttgtgtaaatgt	-----	TTATct	GCTGATTAT	aaaatgtgttaaacagtatt...239...acatt	ctctag	gttggaag
C. Por	gtggcaat	gtaagtcctttc...3987...tgtccatactttaccatgt-t	GTTACAtg	TGTTTATCTg	CGATT	ataaaatgtgttaaacagta--...264...aaat	tttcttag	gttggaag
O. Cun	gtggcaat	gtaagtcctttc...4023...tgtccatgctttaccatgt-t	GTTACAtg	TGTTTATCTg	CGATT	ataaaatgtgttaaacagta--...252...aaat	tttcttag	gttggaag
F. Cat	gtggcgaat	gtaagtcctttc...3178...ta-ccatgttgttacatgtgt	-----	TTATct	GCTGATTAT	aaaatgtgttaaacagtatt...255...aaat	tttcttag	gttggaag
B. Tau	gtggcaat	gtaagtcctttc...4038...tgtccatactttaccatgt-t	GTTACAtg	TGTTTATCTg	CGATT	ataaaatgtgttaaacagta--...259...aaat	tttcttag	gttggaag
E. Cab	gtggcaat	gtaagtcctttc...4049...ta-ccatgttgttacatgtgt	-----	TTATct	GCTGATTAT	aaaatgtgttaaacagtatt...258...aaat	tttcttag	gttggaag
S. Sus	gtggcaat	gtaagtcctttc...4034...ta-ccatgttgttacatgtgt	-----	TTATct	GCTGATTAT	aaaatgtgttaaacagtatt...258...aaat	tttcttag	gttggaag
O. Avi	gtggcaat	gtaagtcctttc...4035...tgtccatactttaccatgt-t	GTTACAtg	TGTTTATCTg	CGATT	ataaaatgtgttaaacagta--...270...aaat	tttcttag	gttggaag
L. Afr	gtggcaat	gtaagtcctttc...4029...ta-ccacgttgttccatgtgt	-----	TTATct	GCTGATTAT	aaaatgtgttaaacagtatt...260...aaat	tttcttag	gttggaag
	** ** *	***** * *	* ** * * ** *	*****		* ** *	*****	

id=768213 gene=ENSG00000121964 name=GTDC1 segment=chr2_144710411_144714761_-1 type=IN

H. Sap	cctagaga	cgttatgatggt...460...ttgcatttaattaatcttaa----	AGTTGca	AGATAAACAgc	TGTAAT	tccgacaacatgacaaaca...246...ttct	taataaag	taccact					
R. Mac	cctagaga	cgttatgatggt...464...----at	tttaattaatcttaagaa	AGTTGca	AGATAAACAgc	TGTAAT	tccgacaacatgacaaaca...245...tttt	taataaag	taccact				
P. Tro	cctagaga	cgttatgatggt...460...ttgcatttaattaatcttaa----	AGTTGca	AGATAAACAgc	TGTAAT	tccgacaacatgacaaata...246...tttt	taataaag	taccact					
P. Abe	cctagaga	cgttatgatggt...460...ttgcatttaattaatcttaa----	AGTTGca	AGATAAACAgc	TGTAAT	tccgacaacatgacaaaca...246...tttt	taataaag	taccact					
C. Jac	cctagaga	cgttatgatggt...461...----at	ttcattaatcttaagaa	AGTTGca	AGATAAACAgc	TGTAAT	tccgacaacatgacaaaca...245...tttt	taataaag	taccact				
R. Nor	cctagaga	cgctatgatggt...472...-----	atcttaagaaacttgcaag	ATAAa	CAGCt	GTAAT	tccgacaacatggcagat...248...tttt	taataaac	tgcccgt				
C. Por	cctagaga	cgttatgatggt...478...-----	taacttaagaaacttgcaag	AGATAAACAgc	TGTAAT	tccgacaacatagcaaata...255...tttt	taataaag	tgcccact					
O. Cun	cctagaga	cgctatgatggt...465...----at	tttaattaatctcaagaa	AGTTGca	AGATAAACAgc	TGTAAT	tccgacaacatggcaaata...252...tttt	taataaac	tgcccact				
F. Cat	cctagaga	cgttatgatggt...468...-----	at	ttat	tttaag	----	ttgcgag	ATAAa	CAGCt	GTAAT	tccgacaacatgggaaat...254...tttt	taataaag	tgcccact
B. Tau	cctagaga	cgttatgatggt...462...----at	tttaattatcttaagaa	AGTTGca	AGATAAACAgc	TGTAAT	tccgacaacatgggaaata...250...tttt	taataaag	tgcccact				
E. Cab	cctagaga	cgttatgatggt...478...-----	atcttaagaaacttgcaag	ATAAa	CAGCt	GTAAT	tccgacaacatgggaaat...253...tttt	taataaag	tgcccact				
S. Sus	cctagaga	cgttatgatggt...469...-----	atcttaagaaacttgtaag	ATAAa	CAGCt	GTAAT	tccgacaacatgggaaat...250...tttt	taataaag	tgcccact				
O. Avi	cctagaga	cgttatgatggt...469...nnnnnnnnnnnnnnnnna-	-----	AGATAAACAgc	TGTAAT	tccgacaacatgggaaata...236...tttt	taataaag	tgcccact					
L. Afr	cctagaga	cgttatgatggt...473...-----	atcttaagaaacttgcaag	ATAAa	CAGCt	GTAAT	tccgacaacatgggaaat...253...tttt	taataaag	taccact				
	*****	** *****	*	*****	*** ** *	** *****	*	*****					

id=768222 gene=ENSG00000121964 name=GTDC1 segment=chr2_144703600_144704393_-1 type=E3 VIEW

Figure 584: CS=4.2



H. Sap	aacgcaag	gtgagtcggggg...4626...	gctgactgtaataattatta	CAAGTTaGTGCAtAATT	ttcgtgctgaaggctgcatg...282...	tgtttgtttcag	ttctagac
R. Mac	aacgcaag	gtgagtcggggg...4626...	gctgactgtaataattatta	CAAGTTaGTGCAtAATT	ttcgtgctgaaggctgcatg...282...	tgtttgtttcag	ttctagac
P. Tro	aacgcaag	gtgagtcggggg...4626...	gctgactgtaataattatta	CAAGTTaGTGCAtAATT	ttcgtgctgaaggctgcttg...282...	tgtttgtttcag	ttctagac
P. Abe	aacgcaag	gtgagtcggggg...4626...	tctgactgtaataattatta	CAAGTTaGTGCAtAATT	ttcgtgctgaaggctgcatg...282...	tgtttgtttcag	ttctagac
C. Jac	aacgcaag	gtgagtagcggg...4626...	gctgactgtaataattatta	CAAGTTaGTGCAtAATT	ttcgtgctgaaggctgcatg...282...	tgtttgtttcag	ttctagac
M. Mus	aacgccag	gtaaagagcggg...4627...	gctgactgtaataattatta	CAAGTTaGTGCAtAATT	ttcgtgctgaaggctgaatg...281...	tgtttgtttcag	ttccagac
R. Nor	aacgccag	gtaaagagcggg...4627...	gctgactgtaataattatta	CAAGTTaGTGCAtAATT	ttcgtgctgaaggctgaatg...281...	tgtttgctcag	ttccagac
C. Por	aacgcaag	gtaaagagccca...4627...	gctgactgtaataattatta	CAAGTTaGTGCAtAATT	ttcgtgctgaaggctgcatg...281...	tgtttgtttcag	ttctagac
O. Cun	aatgccag	gtaaagagcggg...4630...	gctgactgtaataattatta	CAAGTTaGTGCAtAATT	ttcgtgctgaaggctgcatg...278...	tgtttgtttcag	ttctagac
B. Tau	aacgccag	gtaaagagccag...4626...	gctgactgtaataattatta	CAAGTTaGTGCAtAATT	ttcgtgctgaaggctgcatg...282...	tgtttgtttcag	ttctagac
E. Cab	aacgcaag	gtaaagagcggg...4626...	gctgactgtaataattatta	CAAGTTaGTGCAtAATT	ttcgtgctgaaggctgcatg...282...	tgtttgtttcag	ttctagac
O. Avi	nnngacg	gtgggggtggg...4626...	gctgactgtaataattatta	CAAGTTaGTGCAtAATT	ttcgtgctgaaggctgcatg...282...	tgtttgtttcag	ttctagac
L. Afr	aacgcaag	gtaaagaactgg...4626...	gctgactgtaataattatta	CAAGTTaGTGCAtAATT	ttcgtgctgaaggctgcatg...282...	tgtttgtttcag	ttctagac

* ** ***** ** ***** ** ***** **

id=394113 gene=ENSG00000165659 name=DACH1 segment=chr13.72256043.72440053.-1 type=IN

H. Sap	caaaacag	tt-aaagtgaat...69...	taaaatatttgc	atgggtct	AATTTCATAA	TTT	catg
R. Mac	caaaacag	tt-aaagtgaat...69...	taaaatatttgc	atgggtct	AATTTCATAA	TTT	catg
P. Tro	caaaacag	tt-aaagtgaat...69...	taaaatatttgc	atgggtct	AATTTCATAA	TTT	catg
P. Abe	caaaacag	tt-aaagtgaat...69...	taaaatatttgc	atgggtct	AATTTCATAA	TTT	catg
C. Jac	caaaacag	tt-aaagtgaat...69...	taaaatatttgc	atgggtct	AATTTCATAA	TTT	catg
M. Mus	caaaacag	tt-aaagtgaat...69...	taaaatatttgc	atgggtct	AATTTCATAA	TTT	catg
R. Nor	caaaacag	tt-aaagtgaat...69...	taaaatatttgc	atgggtct	AATTTCATAA	TTT	catg
C. Por	caaaacag	tt-aaagtgaat...69...	taaaatatttgc	acgggtct	AATTTCATAA	TTT	catg
O. Cun	caaaacag	tt-aaagtgaat...70...	taaaatatttgc	atgggtct	AATTTCATAA	TTT	catg
B. Tau	caaaacag	tt-aaagtgaat...69...	taaaatatttgc	atgggtct	AATTTCATAA	TTT	catg
E. Cab	caaaacag	tt-aaagtgaat...69...	taaaatatttgc	atgggtct	AATTTCATAA	TTT	catg
O. Avi	caaaacag	tt-aaagtgaat...69...	taaaatatttgc	atgggtct	AATTTCATAA	TTT	catg
L. Afr	caaaacag	tt-aaagtgaat...69...	taaaatatttgc	atgggtct	AATTTCATAA	TTT	catg

***** ** ***** ***** ***** ***** *****

id=394135 gene=ENSG00000165659 name=DACH1 segment=chr13.72038730.72038841.-1 type=IN VIEW

Figure 585:



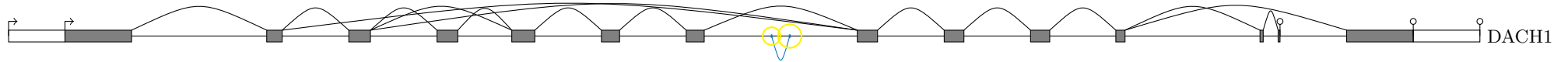
H. Sap	aatacaag	gtaggaatttgc...4753...atattagcacagccaaagca	AATTaATTGCTTTT	ccagtagttgaaccttgtcc...158...taaagttcttag	ctgcaaga
R. Mac	aatacaag	gtaggaatttgc...4753...atattagcacagccaaagca	AATTaATTGCTTTT	ccagtagttgaaccttgtcc...158...taaagttcttag	ctgcaaga
P. Tro	aatacaag	gtaggaatttgc...4753...atattagcacagccaaagca	AATTaATTGCTTTT	ccagtagttgaaccttgtcc...158...taaagttcttag	ctgcaaga
P. Abe	aatacaag	gtaggaatttgc...4753...atattagcacagccaaagca	AATTaATTGCTTTT	ccagtagttgaaccttgtcc...158...taaagttcttag	ctgcaaga
C. Jac	aatacaag	gtaggaatttgc...4753...atattagcacagccaaagca	AATTaATTGCTTTT	ccagtagttgaaccttgtcc...158...taaagttcttag	ctgcaaga
M. Mus	aatacaag	gtaggaatttgc...4753...atattagcacagccaaagca	AATTaATTGCTTTT	ccagtagttgaaccttgtcc...158...taaagttcttag	ccacgaga
R. Nor	aatacaag	gtaggaatttgc...4753...atattagcacagccaaagca	AATTaATTGCTTTT	ccagtagttgaaccttgtcc...158...taaagttcttag	ccgcaaga
C. Por	aatacaag	gtaggaatttgc...4753...gtattagcacagccaaagca	AATTaATTGCTTTT	ccagtagttgaaccttgtcc...158...taaagttcttag	ctgcaaga
O. Cun	aatacaag	gtaggaatttgc...4753...atattagcacagccaaagca	AATTaATTGCTTTT	ccagtagttgaaccttgtcc...158...taaagttcttag	ctgcaaga
C. Fam	aatacaag	gtaggaatttgc...4753...atattagcacagccaaagca	AATTaATTGCTTTT	ccagtagttgaaccttgtcc...158...taaagttcttag	ctgcaaga
F. Cat	aatacaag	gtaggaatttgc...4753...atattagcacagccaaagca	AATTaATTGCTTTT	ccagtagttgaaccttgtcc...158...taaagttcttag	ttgcaaga
B. Tau	aatacaag	gtgggaatttgc...4753...atattagcacagccaaagca	AATTaATTGCTTTT	ccagtagttgaaccttgtcc...158...taaagttcttag	ctgcaaga
E. Cab	aatacaag	gtaggaatttgc...4753...atattagcacagccaaagca	AATTaATTGCTTTT	ccagtagttgaaccttgtcc...158...taaagttcttag	ctgcaaga
L. Afr	aatacaag	gtaggaatttgc...4752...atattagcacagccaaagca	AATTaATTGCTTTT	ccagtagttgaaccttgtcc...159...taaagttcttag	ctgcaaga
*****	** *****	*****	*****	*****	* **

id=394133 gene=ENSG00000165659 name=DACH1 segment=chr13.72038866.72049272.-1 type=IN

H. Sap	caaaacag	tt-aaagtgaattaaaattaaatgaatgaatctcactgaagcaaaa	AAAAGCAGTAATT	aatggttccttaattgtcttcataaaatatttgc	atggttcaatttgcataa	tttgc
R. Mac	caaaacag	tt-aaagtgaattaaaattaaatgaatgaatctcactgaagcaaaa	AAAAGCAGTAATT	aatggttccttaattgtcttcataaaatatttgc	atggttcaatttgcataa	tttgc
P. Tro	caaaacag	tt-aaagtgaattaaaattaaatgaatgaatctcactgaagcaaaa	AAAAGCAGTAATT	aatggttccttaattgtcttcataaaatatttgc	atggttcaatttgcataa	tttgc
P. Abe	caaaacag	tt-aaagtgaattaaaattaaatgaatgaatctcactgaagcaaaa	AAAAGCAGTAATT	aatggttccttaattgtcttcataaaatatttgc	atggttcaatttgcataa	tttgc
C. Jac	caaaacag	tt-aaagtgaattaaaattaaatgaatgaatctcactgaagcaaaa	AAAAGCAGTAATT	aatggttccttaattgtcttcataaaatatttgc	atggttcaatttgcataa	tttgc
M. Mus	caaaacag	tt-aaagtgaattaaaattaaatgaatgaatctcactgaagcaaaa	AAAAGCAGTAATT	aatggttccttaattgtcttcataaaatatttgc	atggttcaatttgcataa	tttgc
R. Nor	caaaacag	tt-aaagtgaattaaaattaaatgaatgaatctcactgaagcaaaa	AAAAGCAGTAATT	aatggttccttaattgtcttcataaaatatttgc	atggttcaatttgcataa	tttgc
C. Por	caaaacag	tt-aaagtgaattaaaattaaatgaatgaatctcactgaagcaaaa	AAAAGCAGTAATT	aatggttccttaattgtcttcataaaatatttgc	atggttcaatttgcataa	tttgc
O. Cun	caaaacag	tt-aaagtgaattaaaattaaatgaatgaatctcactgaagcaaaa	AAAAGCAGTAATT	aatggttccttaattgtcttcataaaatatttgc	atggttcaatttgcataa	tttgc
C. Fam	caaaacag	tt-aaagtgaattaaaattaaatgaatgaatctcactgaagcaaaa	AAAAGCAGTAATT	aatggttccttaattgtcttcataaaatatttgc	atggttcaatttgcataa	tttgc
F. Cat	caaaacag	tt-aaagtgaattaaaattaaatgaatgaatctcactgaagcaaaa	AAAAGCAGTAATT	aatggttccttaattgtcttcataaaatatttgc	atggttcaatttgcataa	tttgc
B. Tau	caaaacag	tt-aaagtgaattaaaattaaatgaatgaatctcactgaagcaaaa	AAAAGCAGTAATT	aatggttccttaattgtcttcataaaatatttgc	atggttcaatttgcataa	tttgc
E. Cab	caaaacag	tt-aaagtgaattaaaattaaatgaatgaatctcactgaagcaaaa	AAAAGCAGTAATT	aatggttccttaattgtcttcataaaatatttgc	atggttcaatttgcataa	tttgc
L. Afr	caaaacag	tt-aaagtgaattaaaattaaatgaatgaatctcactgaagcaaaa	AAAAGCAGTAATT	aatggttccttaattgtcttcataaaatatttgc	atggttcaatttgcataa	tttgc
*****	** *****	*****	*****	*****	*****	*****

id=394135 gene=ENSG00000165659 name=DACH1 segment=chr13.72038730.72038841.-1 type=IN VIEW

Figure 586:



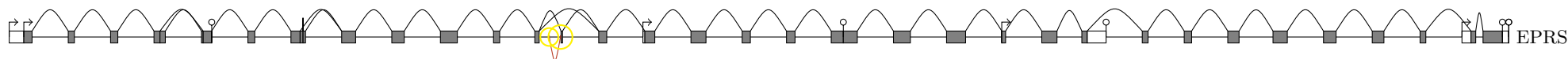
H. Sap	tgaaaaag	gtaatgtatgat...4775...--ttataaagttactcattaat	GTTATCTTGGTTGT	atctccacagctttttcatt...137...aatcacatgcag	atgagacc
R. Mac	tgaaaaag	gtaatgtatgat...4775...--ttataaagttactcattaat	GTTATCTTGGTTGT	atctccacagctttttcatt...137...aatcacatacag	atgagacc
P. Tro	tgaaaaag	gtaatgtatgat...4775...--ttataaagttactcattaat	GTTATCTTGGTTGT	atctccacagctttttcatt...137...aatcacatacag	atgagacc
P. Abe	tgaaaaag	gtaatgtatgat...4775...--ttataaagttactcattaat	GTTATCTTGGTTGT	atctccacagctttttcatt...137...aatcacatacag	atgagacc
C. Jac	tgaaaaag	gtaatgtatgat...4775...--ttataaagttactcattaat	GTTATCTTGGTTGT	atctccacagctttttcatt...137...aatcacatacag	atgagacc
M. Mus	tgaaaaag	gtaatttatgat...4775...--ttataaagttactcattaat	GTTATCTTGGTTGT	atctccacagctttttcatt...137...aatcacatacag	atgagacc
R. Nor	tgaaaaag	gtaatttttgat...4773...gcttataaagttactcattaat	ATGTTATCTTGGTTGT	atctccacagctttttcatt...137...aatcacatacag	atgagacc
C. Por	tgaaaaag	gtaatttatgat...4775...--ttataaagttactcattaat	GTTATCTTGGTTGT	atctccacagctttttcatt...137...aatcacatacag	atgagacc
O. Cum	tgataaag	gtaacatgat...4775...--ttataaagttactcattaat	GTTATCTTGGTTGT	atctccacagctttttcatt...137...aatcacatacag	atgagacc
C. Fam	tgaaaaag	gtaatatatgat...4775...--ttataaagttactcattaat	GTTATCTTGGTTGT	atctccacagctttttcatt...137...aatcacatacag	atgagacc
B. Tau	tgaaaaag	gtaataatata...4775...--ttataaagttactcattaat	GTTATCTTGGTTGT	atctccacagctttttcatt...137...aatcacacacag	atgagacc
E. Cab	tgaaaaag	gtaaatatgat...4775...--ttataaagttactcattaat	GTTATCTTGGTTGT	atctccacagctttttcatt...137...aatcacatacag	atgagacc
L. Afr	tgaaaaag	gtaaatgtgat...4774...--ttataaagttactcattaat	GTTATCTTGGTTGT	atctccacagctttttcatt...138...aatcacatacag	atgagacc
	*** **	**** * *	*****	***** * **	*****

id=394125 gene=ENSG00000165659 name=DACH1 segment=chr13_72063281_72131155_-1 type=IN

H. Sap	tgaaaaag	gtaatgtatgat...4910...attactgaggctcaataaaa	ACAGaCAAGcGTAAC	ttgttctata-tttttgtttcaatcacatgcag	atgagacc
R. Mac	tgaaaaag	gtaatgtatgat...4910...attactgagatcaataaaa	ACAGaCAAGcGTAAC	ttgttctata-tttttgtttcaatcacatacag	atgagacc
P. Tro	tgaaaaag	gtaatgtatgat...4910...attactgaggctcaataaaa	ACAGaCAAGcGTAAC	ttgttctata-tttttgtttcaatcacatacag	atgagacc
P. Abe	tgaaaaag	gtaatgtatgat...4910...attactgaggctcaataaaa	ACAGaCAAGcGTAAC	ttgttctata-tttttgtttcaatcacatacag	atgagacc
C. Jac	tgaaaaag	gtaatgtatgat...4910...attactgaggctcaataaaa	ACAGaCAAGcGTAAC	ttgttctata-tttttgtttcaatcacatacag	atgagacc
M. Mus	tgaaaaag	gtaatttatgat...4910...attactgaggctcaataaaa	ACAGaCAAGcGTAAC	ttgttctata-tttttgtttcaatcacatacag	atgagacc
R. Nor	tgaaaaag	gtaatttttgat...4910...attactgaggctcaataaaa	ACAGaCAAGcGTAACAT	ttgttctata-tttttgtttcaatcacatacag	atgagacc
C. Por	tgaaaaag	gtaatttatgat...4910...attactgaggctcaataaaa	ACAGaCAAGcGTAAC	ttgttctata-tttttgtttcaatcacatacag	atgagacc
O. Cum	tgataaag	gtaacatgat...4910...attactgaggctcaataaaa	ACAGaCAAGcGTAAC	ttgttctata-tttttgtttcaatcacatacag	atgagacc
C. Fam	tgaaaaag	gtaatatatgat...4910...attactgaggctcaataaaa	ACAGaCAAGcGTAAC	ttgttctata-tttttgtttcaatcacatacag	atgagacc
B. Tau	tgaaaaag	gtaataatata...4910...attactgaggctcaataaaa	ACAGaCAAGcGTAAC	ttgttctata-tttttgtttcaatcacacacag	atgagacc
E. Cab	tgaaaaag	gtaaatatgat...4910...attactgaggctcaataaaa	ACAGaCAAGcGTAAC	ttgttctata-tttttgtttcaatcacatacag	atgagacc
L. Afr	tgaaaaag	gtaaatgtgat...4909...attactgaggctcaataaaa	ACAGaCAAGcGTAAC	ttgttctata-tttttgtttcaatcacatacag	atgagacc
	*** **	**** * *	*****	***** * **	*****

id=394125 gene=ENSG00000165659 name=DACH1 segment=chr13_72063281_72131155_-1 type=IN VIEW

Figure 587:



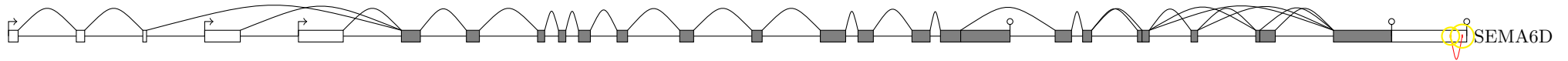
H.Sap	acaaaaag	gtatgtatgta...93...attaacattttgcagacttt	CAGGAAAATGGAATGT	-tttcctt----	ttttaaacacg...129...tctgctttcaag	ctgcgagc
R.Mac	acaaaaag	gtatataatgta...93...attaacattttgcagacttt	CAGGAAAATGGAATGT	-tttcctt----	ttttaaacatg...129...tctgctttcaag	ctgcgagc
P.Tro	acaaaaag	gtatgtatgta...93...attaacattttgcagacttt	CAGGAAAATGGAATGT	-tttcctt----	ttttaaacatg...129...tctgctttcaag	ctgcgagc
P.Abe	acaaaaag	gtatgtatgta...93...attaacattttgcagacttt	CAGGAAAATGGAATGT	-tttcctt----	ttttaaacatg...129...tctgctttcaag	ctgcgagc
C.Jac	acaaaaag	gtatgtatgta...90...ttaacattttgcagacttt	CAGGAAAATGGAATGT	-tttcctt----	ttttaaacatg...128...tctgctttcaag	ctgcgagc
C.Por	acaaaaag	gtacgtgtgta...90...gggatcattttgcagacttt	CAGGAAAATGGAATGT	-tttcctt----	tttgaatacgt...132...tctgctttcaag	ctgcgagc
O.Cun	acaaaaag	gtacgtgtgta...89...attatcattttgcagacttt	CAGGAAAATGGAATGT	-tttcctt----	ttttaaatata...103...tctgctttcaag	ctgcgagt
C.Fam	ataaaaag	gtacatattttg...93...gttaccattttgcagacttt	CAGGAAAATGGAATGT	-tttcctt----	tttaaacataaga...120...tctgctttcaag	ctgcgagc
B.Tau	acaaaaag	gtacatgttttg...96...attgtaattttgcagacttt	CAGGAAAATGGAATGT	-tttactt----	ttttaaacatg...126...tctgctttcaag	ctgcgagc
E.Cab	acaaaaag	gtacatgttttg...93...attaccattttgcagacttt	CAGGAAAATGGAATGT	-tttcctt----	ttttaaacata...125...tctgctttcaag	ctgcgagc
S.Sus	acaaaaag	gtacatgttttg...96...attataactttgtaatttt	CAGGAAAATGGAATGT	-tttactt----	ttttaaacatac...125...tctgctttcaag	ctgcgagc
O.Avi	acaaaaag	gtacatgttttg...96...agtgaattttgcagacttt	CAGGAAAATGGAAT	-gtttttact----	ttttaaacatg...128...tctgctttcaag	ctgcgagc
L.Afr	ataaaaag	gtacatgtttta...65...gaagaatattgcagacttc	CAGGAAAATGGAATG	-atttcctt----	ttttaaagatat...123...tctgctttcaag	ctgcgagc
	* ****	*** * * *	*****	**	* ** *	*****

id=62502 gene=ENSG00000136628 name=EPRS segment=chr1_220191489_220191790_-1 type=IN

H.Sap	acaaaaag	gtatgtatgta...246...--aatTTTTTatgaacactct	GCATTTCATTTTCTG	cctttcaag	ctgcgagc
R.Mac	acaaaaag	gtatataatgta...246...--aatTTTTTatgaacactct	GCATTTCATTTTCTG	cctttcaag	ctgcgagc
P.Tro	acaaaaag	gtatgtatgta...246...--aatTTTTTatgaacactct	GCATTTCATTTTCTG	cctttcaag	ctgcgagc
P.Abe	acaaaaag	gtatgtatgta...246...--aatTTTTTatgaacactct	GCATTTCATTTTCTG	cctttcaag	ctgcgagc
C.Jac	acaaaaag	gtatgtatgta...243...--cattTTTTatgaacactct	GCATTTCA-TTTTCTG	cctttcaag	ctgcgagc
C.Por	acaaaaag	gtacgtgtgta...246...--aatcTTTTatgaacactct	GCATTTCATTTTCTG	cctttcaag	ctgcgagc
O.Cun	acaaaaag	gtacgtgtgta...216...--aatcTTTTatgaacactct	GCATTTCATTTTCTG	cctttcaag	ctgcgagt
C.Fam	ataaaaag	gtacatattttg...237...ttaaatcTTTTatgaacact--	GCATTTCATTTTCTG	cctttcaag	ctgcgagc
B.Tau	acaaaaag	gtacatgttttg...246...--gaatcTTTTatgaacacttt	GCATTTCATTTTCTG	cctttcaag	ctgcgagc
E.Cab	acaaaaag	gtacatgttttg...242...--aatTTcTTatgaacactct	GCATTTCATTTTCTG	cctttcaag	ctgcgagc
S.Sus	acaaaaag	gtacatgttttg...245...-taaaactTTTTatgaacattt	GCATTTCATTTTCTG	cctttcaag	ctgcgagc
O.Avi	acaaaaag	gtacatgttttg...248...--nnnnnnnnnnnnnnnnnnnn	ATTTCATTTTTCTG	cctttcaag	ctgcgagc
L.Afr	ataaaaag	gtacatgtttta...212...--aatcTTTTatgaataactctg	CATTTCATTTTCTG	cctttcaag	ctgcgagc
	* ****	*** * * *	*****	*****	*****

id=62502 gene=ENSG00000136628 name=EPRS segment=chr1_220191489_220191790_-1 type=IN VIEW

Figure 588: CS=12.48



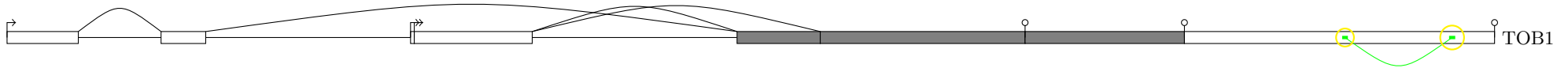
H. Sap	aacatcag	aacttgccacat...2101...t	ttttaatggtacggcataa--	AAAGtaACCCt	AAAGTgaaGTGT	ctctatactgtttatagag-----	...99...at	atacaaatcatt	atatacctg
R. Mac	aacatcag	aacttgccacat...2087...t	ttttaatggtacggcataa--	AAAGtaACCCt	AAAGTgaagtggtctatactgtttt	-----	...105...at	atacaaatcatt	atatacctg
P. Abe	aacatcag	aacttgccacat...2079...t	ttttaatggtacggcataa--	AAAGtaACCCt	AAAGTgaagtggtctatactgtttt	-----	...105...at	atacaaatcatt	atatacctg
C. Jac	aacatcag	aacttgccacat...2086...t	ttttaatggtacggcataa--	AAAGtaACCCt	AAAGTgaagtggtctatactgtttt	-----	...105...at	atacaaatcatt	atatacctg
M. Mus	aacaccag	aacttgccacat...2146...-	ataaaaaataaccctaaag	TGAAGTgGCTCTATA	-----	-----	ctgttttatagagtacttta...92...at	ccaagtcat	acatacctg
C. Por	agcatcac	aactcgcccat...2072...t	ttttaatggtacggcataa--	AAAGtaACCCt	AAAAGTgaagtggtctatactgtttt	-----	...106...at	accaatcatt	atatacctg
O. Cun	agcatcag	aacttgccacat...2087...t	ttttaatggtacggcataa--	AAAGtaACCCt	AAAGTgaagtggtctatactgtttt	-----	...105...at	acaactcat	atatacctg
C. Fam	aacatcag	aacttgccacat...2085...t	ttttaatggtacggcataa--	AAAGtaACCCt	AAAAGTgaagtggtctatactgtttt	-----	...105...at	atacaaatcatt	atatacctg
F. Cat	aacatcag	aacttgccacat...759...t	ttttaatggtacggcataa--	AAAGtaACCCt	AAAAGTgaagtggtctatactgtttt	-----	...105...at	atacaaatcatt	acatacctg
B. Tau	aacatcag	aacttgccacat...2098...t	ttttaatggtacggcataa--	AAAGtaACCCt	AAAAGTgaagtggtctatactgtttt	-----	...105...at	atacaaatcatt	atatacctg
E. Cab	ggcaacag	aacttgccacat...2053...t	ttttaacggtacggcataa--	AAAGtaACCCt	AAAGTgaagtggtctatactgtttt	-----	...105...at	atacaaatcatt	atatacctg
S. Sus	aacatcag	aacttgccacat...2153...t	ttttaatggtacggcataa--	AAAGtaACCCt	AAAGTgaagtggtctatactgtttt	-----	...105...at	atacaaatcatt	atatacctg
O. Avi	aacatcag	aacttgccacat...2107...t	ttttaatggtacggcataa--	AAAGtaACCCt	AAAAGTgaagtggtctatactgtttt	-----	...105...at	atacaaatcatt	atatacctg
L. Afr	aacatcag	aacttgccacat...2059...t	ttttaatggtacggcataa--	AAAGtaACCCt	AAAGTgaagtggtctatactgtttt	-----	...104...at	ccaatcatt	atatacctg
		** ** *	**** ** *		* ** *	**** ** *	*** **	** * ** *	* * *

id=521269 gene=ENSG00000137872 name=SEMA6D segment=chr15_48064131_48066417.1 type=E3

H. Sap	aacatcag	aacttgccacat...2196...g	tattgtggatgtgtaaata-	ATATgTACTT	tGGGTTTTT	-----	-----	aacaccgcatgtaaag-t	caaaaataaaatatacaaatcatt	atatacctg
R. Mac	aacatcag	aacttgccacat...2187...-	gtggatgtgtaaataatag-	TACTT	tGGGTTTTT	-----	-----	aacaccgcatgtaaag-t	caaaaataaaatatacaaatcatt	atatacctg
P. Abe	aacatcag	aacttgccacat...2179...-	gtggatgtgtaaataatag-	TACTT	tGGGTTTTT	-----	-----	aacaccgcatgtaaag-t	caaaaataaaatatacaaatcatt	atatacctg
C. Jac	aacatcag	aacttgccacat...2186...-	gtggatgtgtaaataatag-	TACTT	tGGGTTTTT	-----	-----	aacaccgcatgtaaag-t	caaaaataaaatatacaaatcatt	atatacctg
M. Mus	aacaccag	aacttgccacat...2167...g	aa--gtggctct---atactgttt	TATAGAGTACTTTA	acgtgtatagatatctt	gtaaactgtattgtggatgtg	taaataatgtactttgggtttt	aaacaccgcatgtaaag-t	caaaaataaaatatacaaatcatt	atatacctg
C. Por	agcatcac	aactcgcccat...2172...-	gtggatgtgtaaataatag-	TACTT	tGGGTTTTT	-----	-----	aacaccgcatgtaaag-t	caaaaataaaatatacaaatcatt	atatacctg
O. Cun	agcatcag	aacttgccacat...2187...-	gtggatgtgtaaataatag-	TACTT	tGGGTTTTT	-----	-----	aacaccgcatgtaaag-t	caaaaataaaatatacaaatcatt	atatacctg
C. Fam	aacatcag	aacttgccacat...2185...-	gtggatgtgtaaataatag-	TACTT	tGGGTTTTT	-----	-----	aacaccgcatgtaaag-t	caaaaataaaatatacaaatcatt	atatacctg
F. Cat	aacatcag	aacttgccacat...859...-	gtggatgtgtaaataatag-	TACTT	tGGGTTTTT	-----	-----	aacaccgcatgtaaag-t	caaaaataaaatatacaaatcatt	atatacctg
B. Tau	aacatcag	aacttgccacat...2198...-	gtggatgtgtaaataatag-	TACTT	tGGGTTTTT	-----	-----	aacaccgcatgtaaag-t	caaaaataaaatatacaaatcatt	atatacctg
E. Cab	ggcaacag	aacttgccacat...2153...-	gtggatgtgtaaataatag-	TACTT	tGGGTTTTT	-----	-----	aacaccgcatgtaaag-t	caaaaataaaatatacaaatcatt	atatacctg
S. Sus	aacatcag	aacttgccacat...2253...-	gtggatgtgtaaataatag-	TACTT	tGGGTTTTT	-----	-----	aacacagcatgtaaag-t	caaaaataaaatatacaaatcatt	atatacctg
O. Avi	aacatcag	aacttgccacat...2207...-	gtggatgtgtaaataatag-	TACTT	tGGGTTTTT	-----	-----	aacaccgcatgtaaag-t	caaaaataaaatatacaaatcatt	atatacctg
L. Afr	aacatcag	aacttgccacat...2158...-	gtggatgtgtaaataatag-	TACTT	tGGGTTTTT	-----	-----	aacaccgcatgtaaag-t	caaaaataaaatatacaaatcatt	atatacctg
		** ** *	**** ** *	**** * *	*** **	** * ** *	****	*****	*****	* ** *

id=521269 gene=ENSG00000137872 name=SEMA6D segment=chr15_48064131_48066417.1 type=E3 VIEW

Figure 589:



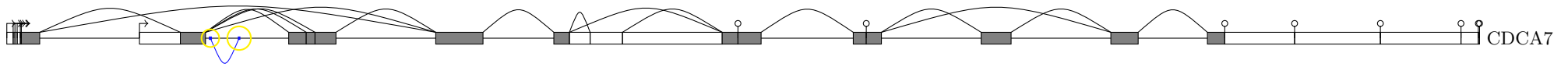
H. Sap	ctaactaa	aaaaagaaaat-...345...atatat--tgtttctacgacat	GGTA	-----	TTGCAT	TATA	-----	tcttttactacagtgatct...333...taaaattaaaaa	---	tgccatt	
R. Mac	ctaactga	aaaaaagaaaat-...356...atatat--tgtttctacgacat	GGTA	-----	TTGCAT	TATA	-----	tcttttactacagtgatct...335...taaaattaaaaa	---	cgccatt	
P. Tro	ctaactaa	aaaaaagaaaat-...346...atatat--tgtttctacgacat	GGTA	-----	TTGCAT	TATA	-----	tcttttactacagtgatct...333...taaaattaaaaa	---	tgccatt	
P. Abe	ctaactaa	aaaaaaaaaac-...347...atatat--tgtttctacgacat	GGTA	-----	TTGCAT	TATA	-----	tcttttactacagtgatct...333...taaaattaaaaa	---	cgccatt	
C. Jac	ctaactaa	aaataagaaaat-...339...atatat--tgtttctacgacat	GGTA	-----	TTGCAT	TATA	-----	tcttttactacagtgatct...331...taaaattaaaaa	---	tgccatt	
M. Mus	ctaactaa	aaaaacaaaaca-...497...gtacaggatattcctttagt--	GGTGAATT	aaAATGTACGAATATT	gcTTTTCA	aaaaaatgtattttctgtta	-----	...171...taaaattaaaaa	---	tgccatc	
R. Nor	ctaactaa	aaaaacaggaaa-...515...gtacaggatattcctttagt--	GGTGAATT	aaAATGTACGAATATT	gcTTTTCA	aaaaaatgtattttctgtta	-----	...174...taaaattaaaaa	---	tgccatc	
C. Por	ctaactaa	agagaaaacctg-...384...atatat--tgtttctacgacat	GGTA	-----	TTGCAT	TATA	-----	tcttttactacaggtgatct...333...aaaaattaaaac	---	tgctctc	
O. Cun	ctaactaa	aaaaaaggaag-...352...atatat--tgtttctacgacat	GGTA	-----	TTGCAT	TATA	-----	tcttttactacagtgatct...332...taaaattaaaaa	---	cgccatt	
C. Fam	ctaactaa	aaaaagaaaaa-...357...atatat--tgtttctacgacac	GGTA	-----	TTGCAT	TATA	-----	tcttttactacagtgatct...329...taaaattaaaaa	---	cgctatc	
F. Cat	-taactag	aaaaagaaaaa-...349...atatat--tgtttctacgacat	GGTA	-----	TTGCAT	TATA	-----	tcttttactacagtgatct...336...--attaaaagcac	---	ttctgtg	
B. Tau	ctaactaa	aaaaagaaaaa-...347...atatat--tgtttctacgacat	GGTA	-----	TTGCAT	TATA	-----	tcttttactacagtgatct...328...taaaattaaaaa	---	catttatt	
E. Cab	ctaactaa	aaaaagaaaaa-...347...atatat--tgtttctacgacat	GGTA	-----	TTGCAT	TATA	-----	tcttttactacagtgatct...332...taaaattaaaaa	---	cgctatt	
S. Sus	ctaactaa	aaaaagaaaaa-...363...atatat--tgtttctacgacat	GGTA	-----	TTGCAT	TATA	-----	tcttttactacagtgatct...334...taaaattaaaca	---	tgcttatt	
L. Afr	ctaactaa	aaaaagcaaaaa-...346...atatat--tgtttctacgacat	GGTA	-----	TTGCAT	TATA	-----	tcttttactacagtgatct...331...taaaattaaaaa	---	tgccgtt	
	*****	* * *		** * * * *	***		**** * * *	** * * **		*****	* *

id=383803 gene=ENSG00000141232 name=TOB1 segment=chr17_48939584_48940340_-1 type=E3

H. Sap	ctaactaa	aaaaaagaaaat-...606...gtaaatattaatTTTgtacc-----	TATA	ttGTGCAACTACT	-----	tgaaaaaacggtataaaaag-...71...taaaattaaaaa	---	tgccatt		
R. Mac	ctaactga	aaaaaagaaaat-...618...gtaaatattaatTTTgtacc-----	TATA	ttGTGCAACTACT	-----	tg-aaaaaacggtataaaaaa...72...taaaattaaaaa	---	cgccatt		
P. Tro	ctaactaa	aaaaaagaaaat-...607...gtaaatattaatTTTgtacc-----	TATA	ttGTGCAACTACT	-----	tgaaaaaacggtataaaaag-...71...taaaattaaaaa	---	tgccatt		
P. Abe	ctaactaa	aaaaaaaaaac-...608...gtaaatattaatTTTgtacc-----	TATA	ttGTGCAACTACT	-----	tgaaaaaacggtataaaaag-...71...taaaattaaaaa	---	cgccatt		
C. Jac	ctaactaa	aaataagaaaat-...598...gtaaatattaatTTTgtacc-----	TATA	ttGTGCAACTACT	-----	tgaaaaaacggtataaaaag-...71...taaaattaaaaa	---	tgccatt		
M. Mus	ctaactaa	aaaaacaaaaca-...580...-aagattttgtctatatatta	TGGAAGAAAATGT	aaTCGTA	aaTATTAATTT	tgTACC	atatattgtgcaactactgaa-...86...taaaattaaaaa	---	tgccatc	
R. Nor	ctaactaa	aaaaacaggaaa-...598...-aagattttgtctatatatta	TGGAAGAAAATGT	aaTCGTA	aaTATTAATTT	tgTACC	atatattgtgcaactactgaa-...89...taaaattaaaaa	---	tgccatc	
C. Por	ctaactaa	agagaaaacctg-...645...gtaaatattaatTTTgtacc-----	TATA	ttGTGCAACTACT	-----	tgaaaaaacggtataaaaag-...71...aaaaattaaaac	---	tgctctc		
O. Cun	ctaactaa	aaaaaaggaag-...612...gtaaatattaatTTTgtacc-----	TATA	ttGTGCAACTACT	-----	tgaaaaaacggtataaaaag-...71...taaaattaaaaa	---	tgccatt		
C. Fam	ctaactaa	aaaaagaaaaa-...615...gtaaatattaatTTTgtacc-----	TATA	ttGTGCAACTACT	-----	tg-aaaaaacggtataaaaag-...70...taaaattaaaaa	---	cgctatc		
F. Cat	-taactag	aaaaagaaaaa-...609...gtaaatattaatTTTgtacc-----	TATA	ttGTGCAACTACT	-----	tg-aaaaaacggtataaaaag-...75...--attaaaagcac	---	ttctgtg		
B. Tau	ctaactaa	aaaaagaaaaa-...604...gtaaatattaatTTTgtacc-----	TATA	ttGTGCAACTACT	-----	tg-aaaaaacggtataaaaag-...70...taaaattaaaaa	---	catttatt		
E. Cab	ctaactaa	aaaaagaaaaa-...608...gtaaatattaatTTTgtacc-----	TATA	ttGTGCAACTACT	-----	tg-aaaaaacggtataaaaag-...70...taaaattaaaaa	---	cgctatt		
S. Sus	ctaactaa	aaaaagaaaaa-...626...gtaaatattaatTTTgtacc-----	TATA	ttGTGCAACTACT	-----	tg-aaaaaacggtataaaaag-...70...taaaattaaaca	---	tgcttatt		
L. Afr	ctaactaa	aaaaagcaaaaa-...606...gtaaatattaatTTTgtacc-----	TATA	ttGTGCAACTACT	-----	tg-aaaaaacggtataaaaag-...70...taaaattaaaaa	---	tgccgtt		
	*****	* * *		* * * *	*****		* * * * *	*****		* *

id=383803 gene=ENSG00000141232 name=TOB1 segment=chr17_48939584_48940340_-1 type=E3 VIEW

Figure 590:



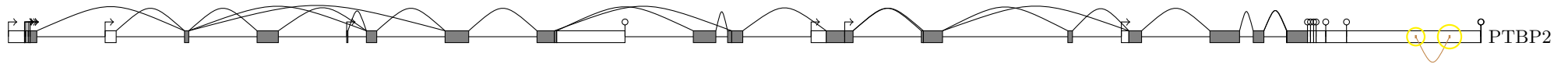
H.Sap	caaacaCG	GTAAGTGCTGCCTg	AGAATaaACAG	aattgagctctgcagtgctca-----	..360..	tttattttacag	aaacctaa
R.Mac	caaacaCG	GTAAGTGCTGCCTg	AGAATaaACAG	aattgagctctgcagtgctca-----	..360..	tttattttacag	aaacctaa
C.Jac	caaacaCG	GTAAGTGCTGCCTg	AGAATaaACAG	aattgagctctgcagtgctca-----	..360..	tttattttacag	aaacctaa
M.Mus	caaacaCA	GTAAGTGCTGCCTg	AGAATaaACAG	gatcgagctctgccatgctcc-----	..372..	tttattttacag	aaacctaa
R.Nor	caaacaCA	GTAAGTGCTGCCTg	AGAATaaACAG	gattgcgtctgcagtgctcc-----	..401..	tttattttacag	aagcctaa
O.Cun	caaacaCG	GTAAGTGCTGCCTg	AGAATaaACAG	aaTGGAGtctgcagcgctccaaatgcc..	..354..	tttattttacag	aaacctaa
C.Fam	caaacaCA	GTAAGTGCTGCCTg	AGAATaaACAG	aatgagctctgcggtgccca-----	..363..	tttattttacag	aaacctaa
F.Cat	caaacaCG	GTAAGTGCTGCCTg	AGAATaaACAG	aattgagctctgcagtgctca-----	..361..	tttattttacag	aaacctaa
B.Tau	caaacaCA	GTAAGTGCTGCCTg	AGAATaaACAG	aaTGGAGtctgcagtgctcaaaatgcc..	..355..	tttattttacag	aaacctaa
E.Cab	caaacaCG	GTAAGTGCTGCCTg	AGAATaaACAG	aattgagctctgcagtgctca-----	..362..	tttattttacag	aaacctaa
S.Sus	caaacaCA	GTAAGTGCTGCCTg	AGAATaaACAG	aaTGGAGtctgcagtgctcaaaatgcc..	..353..	tttattttacag	aaacctaa
O.Avi	caaacaCA	GTAAGTGCTGCCTg	AGAATaaACAG	aaTGGAGtctgcagtgctcaaaatgcc..	..355..	tttattttacag	aaacctaa
L.Afr	caaacaCG	GTAAGTGCTGCCTg	AGAATaaACAG	aattgagctctgcagtgctta-----	..360..	tttattttacag	aaacctaa
*****		*****		** * ***** **		*****	** *****

id=189697 gene=ENSG00000144354 name=CDCA7 segment=chr2_174223566_174223982_1 type=IN

H.Sap	caaacacg	gtaagtgtgcc...	122...-----	taatttcatttcac-tttttg	CTGTgGTTCTAGGTAGTAA	TTGTTG	gaggttagattagctacttat...	206..	tttattttacag	aaacctaa
R.Mac	caaacacg	gtaagtgtgcc...	122...-----	taatttcatttcac-tttttg	CTGTgGTTCTAGGTAGTAA	TTGTTG	gaggttagattagctacttat...	206..	tttattttacag	aaacctaa
C.Jac	caaacacg	gtaagtgtgcc...	122...-----	taatttcatttcac-tttttg	CTGTgGTTCTAGGTAGTAA	TTGTTG	gaggttagattagctacttat...	206..	tttattttacag	aaacctaa
M.Mus	caaacaca	gtaagtgtgcc...	126...-----	tcatttgcctctgc-tctttg	CTGTgGTTCTAGGTAGTAA	TTGTTG	aaggcagattagctgcttat...	214..	tttattttacag	aaacctaa
R.Nor	caaacaca	gtaagtgtgcc...	141...-----	tctctgccttttgc-tctctg	CTGTgGTTCTAGGTAGTAA	TTGTTG	gaggttagattagctacttat...	207..	tttattttacag	aaacctaa
O.Cun	caaacacg	gtaagtgtgcc...	117...-----	cactgtaatttcatttcac-t	TTTTGCTGTgGTTCTAGGTAGTAA	TTGTTG	gaggttagattagctacttat...	207..	tttattttacag	aaacctaa
C.Fam	caaacaca	gtaagtgtgcc...	122...-----	aatttcatttcactttttg	CTGTgGTTCTAGGTAGTAA	TTGTTG	gaggttagattagctacttat...	209..	tttattttacag	aaacctaa
F.Cat	caaacacg	gtaagtgtgcc...	123...-----	taatttcatttcac-tttttg	CTGTgGTTCTAGGTAGTAA	TTGTTG	gaggttagattagctacttat...	206..	tttattttacag	aaacctaa
B.Tau	caaacaca	gtaagtgtgcc...	117...-----	cactgtaatttcatttcac-t	TTTTGCTGTgGTTCTAGGTAGTAA	TTGTTG	gaggttagattagctacttat...	208..	tttattttacag	aaacctaa
E.Cab	caaacacg	gtaagtgtgcc...	122...-----	taatttcatttcac-tttttg	CTGTgGTTCTAGGTAGTAA	TTGTTG	gaggttagattagctacttat...	208..	tttattttacag	aaacctaa
S.Sus	caaacaca	gtaagtgtgcc...	117...-----	cactgtaatttcatttcac-t	TTTTGCTGTgGTTCTAGGTAGTAA	TTGTTG	gaggttagattagctacttat...	206..	tttattttacag	aaacctaa
O.Avi	caaacaca	gtaagtgtgcc...	117...-----	cactgtaatttcatttcac-t	TTTTGCTGTgGTTCTAGGTAGTAA	TTGTTG	gaggttagattagctacttat...	208..	tttattttacag	aaacctaa
L.Afr	caaacacg	gtaagtgtgcc...	121...-----	taatttcatttcac-tttctg	CTGTgGTTCTAGGTAGTAA	TTGTTG	gaggttagaataagctacttat...	207..	tttattttacag	aaacctaa
*****		*****		* * * ***** **		*****	** *****			

id=189697 gene=ENSG00000144354 name=CDCA7 segment=chr2_174223566_174223982_1 type=IN VIEW

Figure 591:



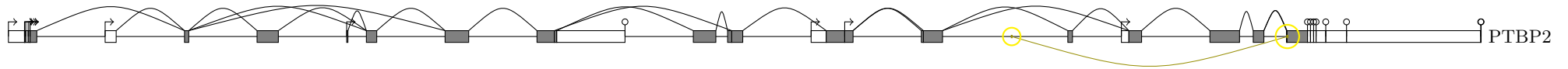
H. Sap	cgtgcctt	aaaaaggaaaac...549...-----tgaattaagatttgaata	TGGTTGTGGATT	CTGAGCATGT	gcagactggctagctagtt...443...taattttctaac	aaagttgg
R. Mac	cgtgcctt	aaaaaggaaaac...548...-----tgaattaagatttgaata	TGGTTGTGGATT	CTGAGCATGT	gcagactggctagctagtt...443...taattttctaac	aaagttgg
P. Tro	tgtgcctt	aaaaaggaaaac...549...-----tgaattaagatttgaata	TGGTTGTGGATT	CTGAGCATGT	gcagactggctagctagtt...443...taattttctaac	aaagttgg
P. Abe	cgtgcctt	aaaaaggaaaac...549...-----tgaattaagatttgaata	TGGTTGTGGATT	CTGAGCATGT	gcagactggctagctagtt...443...taattttctaac	aaagttgg
C. Jac	cgtgcctt	aaaaaggaaaac...549...-----tgaattaagatttgaata	TGGTTGTGGATT	CTGAGCATGT	gcagactggctagctagtt...443...taattttctaac	aaagttgg
M. Mus	cgtgcctt	acaaaggaaaac...534...tccttagtttgaattaaga	TTGGAAAATGGTTGTGGATT	CTGAGCATGT	gcagactggctagctagtt...442...taattttctaac	aaagttgg
R. Nor	cgtgcctt	acaaaggaaaac...533...tccttagtttgaattaaga	TTGGAAAATGGTTGTGGATT	CTGAGCATGT	gcagactggctagctagtt...443...taattttctaac	aaagttgg
C. Por	cgtgcctt	aaaaaggaaaac...537...----tagtttgaattaagatttgaata	GAATATGGTTGTGGATT	CTGAGCATGT	gcagactggctagctagtt...442...taattttctaac	aaagttgg
O. Cun	cgtgcctt	aaaaaggaaaac...546...----tagtttgaattaagatttgaata	GAATATGGTTGTGGATT	CTGAGCATGT	gcagactggctagctagtt...442...taattttctaac	aaagttgg
C. Fam	cgtgcctt	aaaaaggaaaac...550...-----tgaattaagatttgaata	TGGTTGTGGATT	CTGAGCATGT	gcagactggctagctagtt...443...taattttctaac	aaagttgg
B. Tau	cgtgcctt	aaaaaggaaaac...565...-----tgaattaagatttgaata	TGGTTGTGGATT	CTGAGCATGT	gcagaccggctagctagtt...445...taattttctaac	aaagttgg
E. Cab	cgtgcctt	aaaaaggaaaac...544...-----tgaattaagatttgaata	TGGTTGTGGATT	CTGAGCATGT	gcagactggctagctagtt...443...taattttctaac	aaagttgg
O. Avi	cgtgcctt	aaaaaggaaaac...556...-----tgaattaagatttgaata	TGGTTGTGGATT	CTGAGCATGT	gcagaccggctagctagtt...445...taattttctaac	aaagttgg
L. Afr	cgtgcctt	aaaaaggaaaac...551...-----tgaattaagatttgaata	TGGTTGTGGATT	CTGAGCATGT	gcagactggctagctagtt...443...taattttctaac	aaagttgg
	*****	* *****	*****	*****	*****	*****

id=174358 gene=ENSG00000117569 name=PTBP2 segment=chr1.97279268.97280346.1 type=E3

H. Sap	cgtgcctt	aaaaaggaaaac...804...tagatctgactttaataaaaa	ACATGg	CTCAGAATCTACa	GGTCAa	aattaatttgaacagttcctt-----...187...taattttctaac	aaagttgg
R. Mac	cgtgcctt	aaaaaggaaaac...803...tagatctgactttaataaaaa	ACATGg	CTCAGAATCTACa	GGTCAa	aattaatttgaacagttcctt-----...187...taattttctaac	aaagttgg
P. Tro	tgtgcctt	aaaaaggaaaac...804...tagatctgactttaataaaaa	ACATGg	CTCAGAATCTACa	GGTCAa	aattaatttgaacagttcctt-----...187...taattttctaac	aaagttgg
P. Abe	cgtgcctt	aaaaaggaaaac...804...tagatctgactttaataaaaa	ACATGg	CTCAGAATCTACa	GGTCAa	aattaatttgaacagttcctt-----...187...taattttctaac	aaagttgg
C. Jac	cgtgcctt	aaaaaggaaaac...804...tagatctgactttaataaaaa	ACATGg	CTCAGAATCTACa	GGTCAa	aattaatttgaacagttcctt-----...187...taattttctaac	aaagttgg
M. Mus	cgtgcctt	acaaaggaaaac...798...tagatctgactttaataaaaa	ACATGg	CTCAGAATCTACa	GGTCAa	ATTaTTTGAAcagttccttgtcaactgaa...174...taattttctaac	aaagttgg
R. Nor	cgtgcctt	acaaaggaaaac...798...tagatctgactttaataaaaa	ACATGg	CTCAGAATCTACa	GGTCAa	ATTaTTTGAAcagttccttgtcaactgaa...174...taattttctaac	aaagttgg
C. Por	cgtgcctt	aaaaaggaaaac...797...tagatctgactttaataaaaa	ACATGg	CTCAGAATCTACa	GGTCAa	ATTaTTTGAAcagttccttgtcaa-----...181...taattttctaac	aaagttgg
O. Cun	cgtgcctt	aaaaaggaaaac...807...tagatctgactttaataaaaa	ACATGg	CTCAGAATCTACa	GGTCAa	ATTaTTTGAAcagttccttgtcaa-----...180...taattttctaac	aaagttgg
C. Fam	cgtgcctt	aaaaaggaaaac...805...tagatctgactttaataaaaa	ACATGg	CTCAGAATCTACa	GGTCAa	aattaatttgaacagttcctt-----...187...taattttctaac	aaagttgg
B. Tau	cgtgcctt	aaaaaggaaaac...821...tagatctgactttaataaaaa	ACATGg	CTCAGAATCTACa	GGTCAa	aattaatttgaacagttcctt-----...188...taattttctaac	aaagttgg
E. Cab	cgtgcctt	aaaaaggaaaac...799...tagatctgactttaataaaaa	ACATGg	CTCAGAATCTACa	GGTCAa	aattaatttgaacagttcctt-----...187...taattttctaac	aaagttgg
O. Avi	cgtgcctt	aaaaaggaaaac...812...tagatctgactttaataaaaa	ACATGg	CTCAGAATCTACa	GGTCAa	aattaatttgaacagttcctt-----...188...taattttctaac	aaagttgg
L. Afr	cgtgcctt	aaaaaggaaaac...806...tagatctgactttaataaaaa	ACATGg	CTCAGAATCTACa	GGTCAa	aattaatttgaacagttcctt-----...187...taattttctaac	aaagttgg
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id=174358 gene=ENSG00000117569 name=PTBP2 segment=chr1.97279268.97280346.1 type=E3 VIEW

Figure 593:



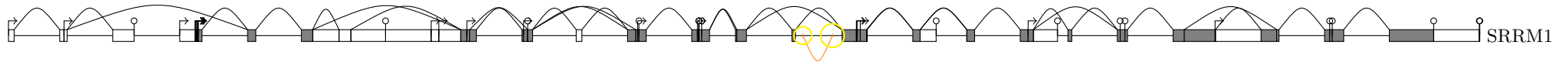
H. Sap	atgaagag	gttagtagaaata...1022...----	gtacagtagacataaacc	caaccA-TTTTCTGAC	CAAA	ttcctgcatttcctatgtac-...379...ctccttcta	aaag	atggttac
R. Mac	atgaagag	gttagtagaaata...1024...----	gtacagtagacataaacc	caaccA-TTTTCTGAC	CAAA	ttcctgcatttcctatgtac-...379...ctccttcta	aaag	atggttac
P. Tro	atgaagag	gttagtagaaata...1027...----	gtacagtagacataaacc	caaccA-TTTTCTGAC	CAAA	ttcctgcatttcctatgtac-...379...ctccttcta	aaag	atggttac
P. Abe	atgaagag	gttagtagaaata...1027...----	gtacagtagacataaacc	caaccA-TTTTCTGAC	CAAA	ttcctgcatttcctatgtac-...378...ctccttcta	aaag	atggttac
C. Jac	atgaagag	gttagtagaaata...1019...tctt	gtacagtagacataaacc	----A-TTTTCTGAC	CAAA	ttcctgcatttcctatgtac-...379...ctccttcta	aaag	atggttac
M. Mus	atgaagag	gttagtagaaata...964...----	gtacagtagacataaacc	caaccA-TTTTCTGAC	CAAA	ttcctgcatttcctatgtac-...378...ctccttcta	aaag	atggttac
R. Nor	atgaagag	gttagtagaaata...966...----	gtacagtagacataaacc	caaccA-TTTTCTGAC	CAAA	ttcctgcatttcctatgtac-...379...ctccttcta	aaag	atggttac
C. Por	atgaagag	gttagtagcaata...975...----	gtacagtagacataaacc	caaccA-TTTTCTGAC	CAAA	ttcctgcatttcctatgtac-...378...ctccttcta	aaag	atggttac
O. Cun	atgaagag	gttagtagaatg...985...----	gtacagtagacataaacc	caaccA-TTTTCTGAC	CAAA	ttcctgcatttcctatgtac-...379...ctccttcta	aaag	atggttac
C. Fam	atgaagag	gttagtagaaata...1010...----	gtacagtagacataaacc	caaccA-TTTTCTGAC	CAAA	ttcctgcatttcctatgtac-...380...ctccttcta	aaag	atggttac
B. Tau	atgaagag	gttagtagaaata...1003...----	gtacagtagacataaacc	caaccA-TTTTCTGAC	CAAA	ttcctgcatttcctatgtact...380...ctccttcta	aaag	atggttac
E. Cab	atgaagag	gttagtagaaata...987...----	gtacagtagacataaacc	caaccA-TTTTCTGAC	CAAA	ttcctgcatttcctatgtac-...380...ctccttcta	aaag	atggttac
L. Afr	acgaagag	gttagtagacatta...998...----	gtacagtagacataaacc	caaccA-TTTTCTGAC	CAAA	ttcctgcatttcctatgtac-...382...ctccttcta	aaag	atggttac
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id=174341 gene=ENSG00000117569 name=PTBP2 segment=chr1.97270496.97271974.1 type=IN

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P. Tro	ttttttca	gtaagcaagcct...128...gaagtatctaattttataat	TTTGttTCAG	AagAGATc
P. Abe	ttttttca	gtaagcaagcct...128...aaagtatctaattttataat	TTTGttTCAG	AagAGATc
C. Jac	ttttttca	gtaagcaagcct...128...gaagtatctaattttataat	TTTGttTCAG	AagAGATc
M. Mus	ttttttca	gtaagcaagcct...104...gaagtatctaatttcataat	TTTGttTCAG	AagAGATc
R. Nor	ttttttca	gtaagcaagcct...105...gaagtatctaatttcataat	TTTGttTCAG	AagAGATc
C. Por	ttttttca	gtaagcaagcct...132...gaagtgtctaatttcataat	TTTGttTCAG	AaGAGATc
O. Cun	ttttttca	gtaagcaagcct...123...aaagtatctaatttgataat	TTTGttTCAG	AagAGATc
C. Fam	ttttttca	gtaagcaagcct...123...gaagtatctaatttcataat	TTTGttTCAG	AagAGATc
B. Tau	ttttttca	gtaagcaagcct...120...gaagtatctaatttcataat	TTTGttTCAG	AagAGATc
E. Cab	ttttttca	gtaagcaagcct...150...gaagtatctaatttcataat	TTTGttTCAG	AagAGATc
L. Afr	ttttttca	gtaagcaagcct...130...aaagtatctaatttcataat	TTTGttTCAG	AagAGATc

id=174350 gene=ENSG00000117569 name=PTBP2 segment=chr1.97278663.97278828.1 type=IN VIEW

Figure 594: CS=6.24



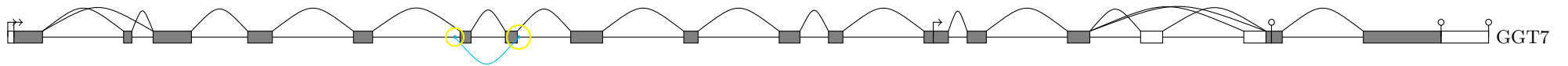
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R. Mac	ttctgcag	gtacacataatt...34...tcgagaggccctgcttcta	AGTTTATGTAGCTAA	atgaattcctag-tttgcac-...395...ttcattccacag	aagaagac
P. Tro	ttctgcag	gtacacataatt...34...tcgagaggccctgcttcta	AGTTTATGTAGCTAA	atgaattcctag-tttgcac-...398...tttattccacag	aagaagac
P. Abe	ttctgcag	gtacacataatt...34...tcgagaggccctgcttcta	AGTTTATGTAGCTAA	atgaattcctag-tttgcac-...401...tttattccacag	aagaagac
C. Jac	ttctgcag	gtacacataatt...34...tcgagaggccctgcttcta	AGTTTATGTAGCTAA	atgaattcctag-tttgcac-...388...tttattccacag	aagaagac
M. Mus	ttctgcag	gtacacataatt...35...tcgagaggccctgcttcta	AGTTTATGTAGCTAA	atgaattcctag-tttgcac-...356...tttattccacag	aaggaggc
R. Nor	ttctgcag	gtacacataatt...35...tcgagaggccctgcttcta	AGTTTATGTAGCTAA	atgaattcctag-tttgcac-...375...cttttccacag	aaggaggc
C. Por	ttctgcag	gtacacataatt...35...tcgagaggccctgcttcta	AGTTTATGTAGCTAA	atgaattcctag-tttgcac-...392...tttattccacag	aagaagac
O. Cun	ttctgcag	gtacacataatt...34...tcgagaggccctgcttcta	AGTTTATGTAGCTAA	atgaattcctag-tttgcac-...394...tttattccacag	aagaagac
C. Fam	ttctgcag	gtacacataatt...33...tcgagaggccctgcttcta	AGTTTATGTAGCTAA	atgaattcctag-tttgcac-...408...tttattccacag	aagaagac
B. Tau	ttctgcag	gtacacataatt...34...tcgagaggccctgcttcta	AGTTTATGTAGCTAA	atgaattcctag-tttgcac-...402...tttattccacag	aagaagac
E. Cab	ttctgcag	gtacacataatt...34...tcgagaggccctgcttcta	AGTTTATGTAGCTAA	atgaattcctag-tttgcac-...393...tttattccacag	aaggaggc
S. Sus	ttctgcag	gtacacataatt...33...tcgagaggccctgcttcta	AGTTTATGTAGCTAA	atgaattcctag-tttgcac-...387...tttattccacag	aagaagac
D. Avi	ttctgcag	gtacacataatt...34...tcgagaggccctgcttcta	AGTTTATGTAGCTAA	atgaattcctag-tttgcac-...398...tttattccacag	aagaagac
L. Afr	ttctgcag	gtacacataatt...34...tcgagaggccctgcttcta	AGTTTATGTAGCTAA	atgaattcctag-tttgcac-...387...tttattccacag	aagaagac
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id=791488 gene=ENSG00000133226 name=SRRM1 segment=chr1_24980835_24981345_1 type=IN

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R. Mac	ttctgcag	gtacacataatt...356...-tttggactca-tttatgtgc	TTAGCTACATAAACT	caaaagtcggataaaaatag...73...ttcattccacag	aagaagac
P. Tro	ttctgcag	gtacacataatt...359...-tttggactca-tttatgtgc	TTAGCTACATAAACT	caaaagtcggataaaaatag...73...tttattccacag	aagaagac
P. Abe	ttctgcag	gtacacataatt...362...-tttggactca-tttatgtgc	TTAGCTACATAAACT	caaaagtcggataaaaatag...73...tttattccacag	aagaagac
C. Jac	ttctgcag	gtacacataatt...357...-tttggactca-tttatgtgc	TTAGCTACATAAACT	caaaagtcggataaaaatag...65...tttattccacag	aagaagac
M. Mus	ttctgcag	gtacacataatt...316...-tttgaagtaa-tttatgtgc	TTAGCTACATAAACT	caaaagtcggataaaaatag...75...tttattccacag	aaggaggc
R. Nor	ttctgcag	gtacacataatt...336...-tttgaagtaa-tttatgtgc	TTAGCTACATAAACT	caaaagtcggataaaaatag...74...cttttccacag	aaggaggc
C. Por	ttctgcag	gtacacataatt...350...-tttaaaactca-tttatgtgc	TTAGCTACATAAACT	caaaagtcggataaaaatag...77...tttattccacag	aagaagac
O. Cun	ttctgcag	gtacacataatt...347...-tgggggggctca--ctatgtgc	TTAGCTACATAAACT	caaaagtcggataaaaatag...81...tttattccacag	aagaagac
C. Fam	ttctgcag	gtacacataatt...368...-tttaaaactca-tttatgtgc	TTAGCTACATAAACT	caaaagtcggataaaaatag...73...tttattccacag	aagaagac
B. Tau	ttctgcag	gtacacataatt...357...-aagcaaaactca-tttatgtgc	TTAGCTACATAAACT	caaaagtcggataaaaatag...79...tttattccacag	aagaagac
E. Cab	ttctgcag	gtacacataatt...369...-tttttaactca-tttatgtgc	TTAGCTACATAAACT	caaaagtcggataaaaatag...58...tttattccacag	aaggaggc
S. Sus	ttctgcag	gtacacataatt...347...-cctttaaaaaa-ttaatgtgc	TTAGCTACATAAACT	caaaagtcggataaaaatag...73...tttattccacag	aagaagac
D. Avi	ttctgcag	gtacacataatt...355...-aagcaaaactca-tttatgtgc	TTAGCTACATAAACT	caaaagtcggataaaaatag...77...tttattccacag	aagaagac
L. Afr	ttctgcag	gtacacataatt...353...-tgggggactca-tttatgtgc	TTAGCTACATAAACT	caaaagtcggataaaaatag...68...tttattccacag	aagaagac
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id=791488 gene=ENSG00000133226 name=SRRM1 segment=chr1_24980835_24981345_1 type=IN VIEW

Figure 595: CS=9



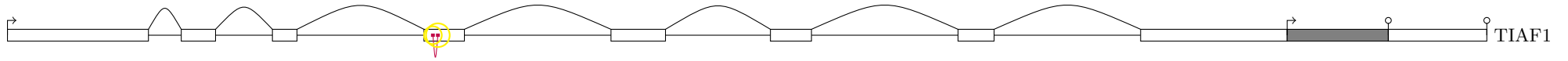
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R. Mac	agaccaag	gtggggaccctg...1067...	-----agttcagcccagcacc-----	TTCCA gTGACCTGGTC	tcctctctccctcgctaccgccttgcccag	cctgggct
P. Tro	agaccaag	gtggggaccctg...1036...	-----agttcagcccagcacc-----	TTCCA gTGACCTGGTC	tcctctctccctcgctaccgccttgcccag	cctgggct
P. Abe	agaccaag	gtggggaccctg...1029...	-----agttcagcccagcacc-----	TTCCA gTGACCTGGTC	tcctctctccctcgctaccgccttgcccag	cctgggct
C. Jac	agaccaag	gtggggaccctg...1075...	-----agttcagcccagcacc-----	TTCCA gTGACCTGGTC	tcctctctccctcgctaccgccttgcccag	cctgggct
M. Mus	ataccaag	gtggggaccctg...1144...	-----agttcagcccagcacc-----	TTCCA gTGACCTGGTC	tcctctctccctcgctaccgccttgcccag	cctgggct
R. Nor	ataccaag	gtggggaccctg...1072...	-----agttcagcccagcacc-----	TTCCA gTGACCTGGTC	tcctctctccctcgctaccgccttgcccag	cctgggct
C. Por	agaccaag	gtggggacccta...737...	-----agttcagcccagcacc-----	TTCCA gTGACCTGGTC	tcctctctccctcgctaccgccttgcccag	ccgggct
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C. Fam	aaaccaag	gtggggaccctg...782...	-----agttcagcccagcacc-----	TTCCA gTGACCTGGTC	tcctctctccctcgctaccgccttgcccag	cctgggct
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E. Cab	agaccaag	gtggggaccctg...784...	-----agttcagcccagcacc-----	TTCCA gTGACCTGGTC	tcctctctccctcgctaccgccttgcccag	cctgggct
S. Sus	agaccaag	gtggggaccctg...785...	-----gagttcagcccagcacc-----	TTCCA gTGACCTGGTC	tcctctctccctcacctgcccgccttgcccag	cctgggct
L. Afr	agaccaag	gtggggaccctg...1205...	-----agttcagcccagcacc-----	TTCCA gTGACCTGGTC	tcctctctccctcgctaccgccttgcccag	cctgggct
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id=183330 gene=ENSG00000131067 name=GGT7 segment=chr20_33448125_33449247_-1 type=IN

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R. Mac	tGATCtAG	GTC AgTGGGG	-----cctggggatttgggagagac...288...	ccctgcctctag	cccgtgcc
P. Tro	tGATCtAG	GTC AgTGGGG	-----cctggggatttgggagagac...287...	ccctgcccctag	cccgtgcc
P. Abe	tGATCtAG	GTC AgTGGGG	-----cctggggatttgggagagac...287...	ccctgcccctag	cccgtgcc
C. Jac	tGATCtAG	GTC AgTGGGG	-----cctggggatttgggagagac...290...	ccctgcccctag	cccgtgcc
M. Mus	tGATCtAG	GTC AgTGGGG	-----cctggagggtgggggttgggg...253...	tccccgcgcag	ctcatgcc
R. Nor	tGATCtAG	GTC AgTGGGG	-----ccggagggtgacggggagagg...255...	aacccccacag	ctcatgcc
C. Por	tGATCtAG	GTC AgTGGGA	-----cctgggggttggggagagagg...285...	tcctgcccctag	cccgtgcc
O. Cun	tGATCtAG	GTC AgTGGGG	-----ccgggggttggggagagacat...272...	ccttgcctctag	cccgtgcc
C. Fam	tGATCtAG	GTC AgTGGGG	-----cctgggggttggggagaaaagg...261...	ccctacttgtag	cccgtgcc
F. Cat	tGATCtAG	GTC AgTGGGGcc TGGGGTTGGG	gggaaggcatgagttgatg...260...	ccctgcttgtag	cccagacc
E. Cab	tGATCtAG	GTC AgTGGGG	-----cctgggggttggggagaaagg...301...	ctctgcccctag	cccgcgcc
S. Sus	tGATCtAG	GTC AgTGGGG	-----ccttgggggttgggtaagg...267...	ccctgcccctag	cccagacc
L. Afr	tGATCtAG	GTC AgTGGGG	-----cttgggggttggggagagagg...267...	ccctgcccctag	cccgcgcc
	*****	***** **	*	* **	* * **

id=183334 gene=ENSG00000131067 name=GGT7 segment=chr20_33447443_33447771_-1 type=IN VIEW

Figure 596: CS=17.64



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P.Tro acctctag ctacaagccctccagaGCCAaggTGGAGTTCCtGGAGCagTCCATGGTggacaagtccttggtagca...59...aacggctggag gtgggttc
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C.Jac acctctag ctacaagccctccagaGCCAaggTGGAGTTCCtGGAGCagTCCATGGTggacaagtccttggtagca...59...aacggctggag gtgggttc
M.Mus acccctag ctacaagctctgcagaGCCAaggTGGAGTTCCtGGAGCagTCCATGGTggacaagtccttgcagca...59...aagcgctggag gtgggttc
R.Nor actcctag ctacaagctctgcagaGCCAaggTGGAGTTCC-----ctagagcagtccttggtagca...76...aacgtctggag gtgggttc
C.Por ctttccag ctacaagccctccagaGCCAaggTGGAGTTCCtGGAGCagTCCATGGTggacaagtccttggtagca...59...aagcgctggag gtgggttc
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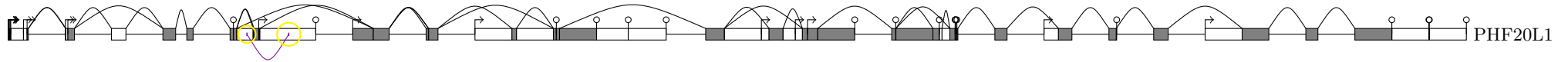
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Figure 597:



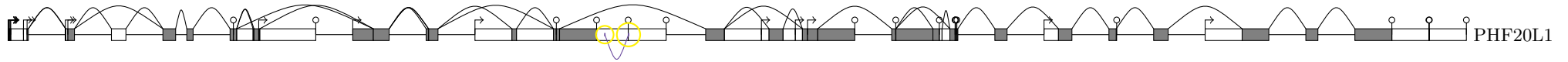
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F. Cat	aggggcag	gtaagagagtgc...109..	-----taggattatgtgctgatagc	CCCAAAATAGCAGCa	AGAAaAGGAAG	ccttagactgtaaataaatt...51..	ataggtcactag	tttctggt
B. Tau	aggggcag	gtaagagtgttc...98..	-----taggattatgtgctgatagc	CCCAAAATAGCAGCa	AGAAaAGGAAG	ccttagactgtaaataaatt...51..	acaggtcactag	tttctggt
E. Cab	aggggcag	gtaagagtgttc...81..	-----taggattatgtgctgatagc	CCCAAAATAGCAGCa	AGAAaAGGAAG	ccttagactgtaaataaatt...51..	ataggtcactag	tttctggt
S. Sus	aggggcag	gtaagagtgttc...98..	-----taggattatgtgctgatagc	CCCAAAATAGCAGCa	AGAAaAGGAAG	ccttagactgtaaataaatt...51..	ataggtcactag	tttctggt
L. Afr	aggggcag	gtaagagtgttc...91..	-----tagggttatgtgctgatagc	CCCAAAATAGCAGCa	AGAAaAGGAAG	ccttagactgtaaataaatt...51..	ataggtcactag	tttctggt
		* ** ** *		*** ** ** ** *	***** ** ** *		* ** ** *	*****

id=105968 gene=ENSG00000129292 name=PHF20L1 segment=chr8.133811107.133811328.1 type=AN

H. Sap	gaagtgag	gtaagagccttt...337..	tagaaatttaaataat	TTTTCTa	TTCTGCTGTTATTTGGG	attttcagcacctggaccta	...332..	ttccacatgta	tgtataaa
R. Mac	gaagtgag	gtaagagccttt...343..	-----ttaaataat	TTTTCTa	TTCTGCTGTTATTTGGG	attttcagcacctggaccta	...329..	ttccacatgta	tgtataaa
P. Tro	gaagtgag	gtaagagccttt...337..	tagaaatttaaataat	TTTTCTa	TTCTGCTGTTATTTGGG	attttcagcacctggaccta	...332..	ttccacatgta	tgtataaa
P. Abe	gaagtgag	gtaagagccttt...337..	tagaaatttaaataat	TTTTCTa	TTCTGCTGTTATTTGGG	attttcagcacctggaccta	...332..	ttccacatgta	tgtataaa
C. Jac	gaagtgag	gtaagagccttt...341..	-----atttaaata	TTTTCTa	TTCTGCTGTTATTTGGG	attttcagcacctggaccta	...327..	ttccacatata	tatataaa
M. Mus	gaagtgag	gtaagagccttt...334..	-----gaaagat	TTTTCTa	TTCTGCTGTTATTTGGG	attttcagcacctggaccta	...293..	tgtgcatattat	tatataaa
R. Nor	gaagtgag	gtaagagccttt...331..	-----gaaagat	TTTTCTa	TTCTGCTGTTATTTGGG	attttcagcacctggaccta	...281..	tgtagattatg	tgtataaa
C. Por	gaagtgag	gtaagagccttt...325..	-----aggaaact	TTTTCTa	TTCTGCTGTTATTTGGG	attttcagcacctggaccta	...326..	tttcttctgtc	ggtataaa
O. Cun	gaagtgag	gtaagagccttg...340..	-----ttaaaca	TTTTCTa	TTCTGCTGTTATTTGGG	attttcagcacctggaccta	...335..	tttctacatgta	tgtataaa
C. Fam	gaagtgag	gtaagagccttt...339..	-----ttaaata	TTTTCTa	TTCTGCTGTTATTTGGG	attttcagcacctggaccta	...338..	ttcctgcttga	catataat
F. Cat	gaagtgag	gtaagagccttt...339..	-----ttaaata	TTTTCTa	TTCTGCTGTTATTTGGG	attttcagcacctggaccta	...345..	ttcctacttga	tgtataaa
B. Tau	gaagtgag	gtgagtgcccttt...339..	-----ttaaagt	TTTTCTa	TTCTGCTGTTATTTGGG	attttcagcacctggaccta	...349..	tttctacttga	tatataaa
E. Cab	gaagtgag	gtaagagccttt...334..	-----ttaaata	TTTTCTa	TTCTGCTGTTATTTGGG	attttcagcacctggaccta	...341..	ttcctacttga	tgtataaa
S. Sus	gaagtgag	gtaagagccttt...337..	-----ttaaata	TTTTCTa	TTCTGCTGTTATTTGGG	attttcagcacctggaccta	...339..	ttcctacttga	tatctaaa
L. Afr	gaagtgag	gtaagagccttt...334..	-----tgaaat	TTTTCTa	TTCTGCTGTTATTTGGG	attttcagcacctggaccta	...323..	ttcacttga	tgtataaa
		***** ** ** *		* ** ** *	***** ** ** *		* ** ** *	*****	

id=105972 gene=ENSG00000129292 name=PHF20L1 segment=chr8.133811419.133812175.1 type=AN VIEW

Figure 598: CS=7.2



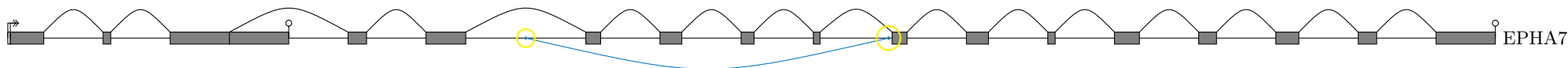
H.Sap	ttttg	tacttttcttta...61...actattc	aaat	ttttg	TATTGTA	TGAGTTTTTCAGGGT	TATTTTA	GCCTGA	attgataacaatgcg	ttgtt...266...ctggaaaattca	ttacaatg	
R.Mac	ttttg	tacttttcttta...66...gctattc	aaat	ttttg	TATTGTA	TGAGTTTTTCAGGGT	TATTTTA	GCCTGA	attgataaacagtcg	ttgtt...266...ctggaaaattca	ttacaatg	
P.Tro	ttttg	tacttttcttta...66...actattc	aaat	ttttg	TATTGTA	TGAGTTTTTCAGGGT	TATTTTA	GCCTGA	attgataacaatgcg	ttgtt...266...ctggaaaattca	ttacaatg	
P.Abe	ttttg	tacttttcttta...66...actattc	aaat	ttttg	TATTGTA	TGAGTTTTTCAGGGT	TATTTTA	GCCTGA	attgataacaatgc	ttgtt...261...ctggaaaattca	ttacaatg	
C.Jac	ttttg	tacttttcttta...66...aatattc	aaat	ttttg	TATTGTA	TGAGTTTTTCAGGGT	TATTTTA	GCCTGA	attgataaacagtcg	ttgtt...265...ctggaaaattca	ttacaatg	
M.Mus	ttttg	tacttttcttta...67...gataacc	aaat	ttttg	TATTGTA	TGAGTTTTTCAG	-----	-----	tggtgattcag--gc	ctgatt...282...ctggaaaattca	ttacaatg	
R.Nor	ttttg	tacttttcttta...63...gatagcc	aaat	ttttg	TATTGTA	TGAGTTTTTCAG	-----	-----	tggttatttag--gc	ctgatt...278...ctggaaaattca	ttacaatg	
C.Por	ttttg	tacttttcttta...70...aatagtc	aaat	ttttg	TATTGTA	TGAGTTTTTCAG	-GTA	TTTTA	GCCTAA	tttaataacagtc	ttgtt...257...ctggaaaattca	ttacaatg
O.Cun	ttttg	tacttttcttta...71...agtagtc	aaat	ttttg	TATTGTA	TGAGTTTTTCAGGGT	TATTTTA	GCCTGA	attgataaacagtcg	ttgtt...266...ctggaaaattca	ttacaatg	
C.Fam	ttttg	tacttttcttta...71...aatagtc	aaat	ttttg	TATTGTA	TGAGTTTTTCAGGGT	TATTTTA	GCCTGA	attgataaacagtc	ttgtt...273...ctggaaaattca	ttacaatg	
B.Tau	ttttg	tacttttcttta...71...aacagtc	aaat	ttttg	TATTGTA	TGAGTTTTTCAGGGT	TATTTTA	GCCTGA	attgataaacagtc	ttgtt...265...ctggaaaattca	ttacaatg	
E.Cab	ttttg	tacttttcttta...71...aatagtc	aaat	ttttg	TATTGTA	TGAGTTTTTCAGGGT	TATTTTA	GCCTGA	attgataaacagtcg	ttgtt...265...ctggaaaattca	ttacaatg	
S.Sus	ttttg	tacttttcttta...71...aatagtc	aaat	ttttg	TATTGTA	TGAGTTTTTCAGGGT	TATTTTA	GCCTGA	attgataaacagtcg	ttgtt...267...ctggaaaattca	ttacaatg	
O.Avi	ttttg	tacttttcttta...64...aacagtc	aaat	ttttg	TATTGTA	TGAGTTTTTCAGGGT	TATTTTA	GCCTGA	attgataaacagtc	ttgtt...267...ctggaaaattca	ttacaatg	
L.Afr	ttttg	tacttttcttta...76...aaaagtc	aaat	ttttg	TATTGTA	TGAGTTTTTCAGGGT	TATTTTA	GCCT	cattgataaacagtc	ttgtt...258...ctggaaaattca	ttacaatg	
*****	*	* * * *	*	*****	*	*	*	*	*	*****	*****	

id=105987 gene=ENSG00000129292 name=PHF20L1 segment=chr8.133824134.133824561.1 type=AN

H.Sap	ttttg	tacttttcttta...366...gaatgcg	ataatcagggac	TTGGGT	aaTAAAATG	TTCTG	GAAAATTCA	tTACAATg
R.Mac	ttttg	tacttttcttta...371...gaatgcg	ataatcagggac	TTGGGT	aaTAAAATG	TTCTG	GAAAATTCA	tTACAATg
P.Tro	ttttg	tacttttcttta...371...gaatgcg	ataatcagggac	TTGGGT	aaTAAAATG	TTCTG	GAAAATTCA	tTACAATg
P.Abe	ttttg	tacttttcttta...366...gaatgcg	ataatcagggac	TTGGGT	aaTAAAATG	TTCTG	GAAAATTCA	tTACAATg
C.Jac	ttttg	tacttttcttta...370...gagtcg	ataatcagggac	TTGGGT	aaTAAAATG	TTCTG	GAAAATTCA	tTACAATg
M.Mus	ttttg	tacttttcttta...389...--acttg	ggaataaaatattt	-----	-----	CTG	GAAAATTCA	tTACAATg
R.Nor	ttttg	tacttttcttta...381...--ggac	gggaataaaatattt	-----	-----	CTG	GAAAATTCA	tTACAATg
C.Por	ttttg	tacttttcttta...365...gaatgc	ataatcagggac	TTGGGT	aaTAAAATG	TTCTG	GAAAATTCA	tTACAATg
O.Cun	ttttg	tacttttcttta...376...gaatgcg	ataatcagggac	TTGGGT	aaTAAAATG	TTCTG	GAAAATTCA	tTACAATg
C.Fam	ttttg	tacttttcttta...383...gaatgc	ataatcagggac	TTGGGT	aaTAAAATG	TTCTG	GAAAATTCA	tTACAATg
B.Tau	ttttg	tacttttcttta...375...gaatgc	ataatcagggac	TTGGGT	aaTAAAATG	TTCTG	GAAAATTCA	tTACAATg
E.Cab	ttttg	tacttttcttta...375...gaatgc	ataatcagggac	TTGGGT	aaTAAAATG	TTCTG	GAAAATTCA	tTACAATg
S.Sus	ttttg	tacttttcttta...377...gaatgc	ataatcagggac	TTGGGT	aaTAAAATG	TTCTG	GAAAATTCA	tTACAATg
O.Avi	ttttg	tacttttcttta...370...gaatgc	ataatcagggac	TTGGGT	aaTAAAATG	TTCTG	GAAAATTCA	tTACAATg
L.Afr	ttttg	tacttttcttta...373...--gtgc	ataatcagggactt	GGGT	aaTAAAATG	TTCTG	GAAAATTCA	tTACAATg
*****	*	* * * *	*	*****	*	*	*	*****

id=105987 gene=ENSG00000129292 name=PHF20L1 segment=chr8.133824134.133824561.1 type=AN VIEW

Figure 600:



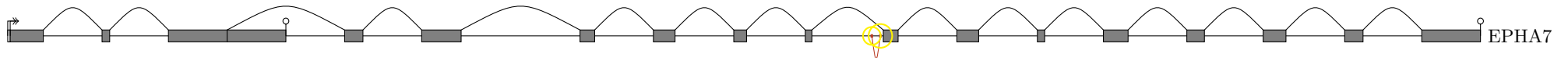
H.Sap	tcaagcag	gtatgttttg	..4833..	tagcttctgaattgtgagct	ATGAAAAGGTGCTT	tctttacctaataagaact	...78...	ttgtccaaacag	ctccctcg
P.Tro	tcaagcag	gtatgttttg	..4833..	tagcttctgaattgtgagct	ATGAAAAGGTGCTT	tctttacctaataagaact	...78...	ttgtccaaacag	ctccctcg
P.Abe	tcaagcag	gtatgttttg	..4833..	tagcttctgaattgtgagct	ATGAAAAGGTGCTT	tctttacctaataagaact	...78...	ttgtccaaacag	ctccctca
C.Jac	tcaagcag	gtatgtccttg	..4833..	tagcttctgaattgtgagct	ATGAAAAGGTGCTT	tctttacctaataagaact	...78...	ttgtccaaacag	ctccctcg
M.Mus	tcaagcag	gtaagtgcagg	..4833..	tagctttgaattgtgagct	ATGAAAAGGTGCTT	tctttacctaataagaact	...78...	ttgtccaaacag	ctccctcg
R.Nor	tcaagcag	gtatgtgccgcg	..4834..	-agcttttgaattgtgggttc	TGAAAAGGTGCTT	tctttacnttaataagaact	...78...	ttgtccaaacag	ctccctcg
C.Por	tcaagcag	gtatgtcctttg	..4833..	taacttctgaattgtgagct	ATGAAAAGGTGCTT	tctttacctaataagaact	...78...	ttgtccaaacag	ctccctcg
O.Cun	tcaagcag	gtacgttttg	..4833..	tagcttctgaattgtgagct	ATGAAAAGGTGCTT	tctttacctaataagaact	...78...	ttgtccaaacag	ctccctcg
C.Fam	tcaagcag	gtatgttttg	..4833..	tagcttctgaattgtgagct	ATGAAAAGGTGCTT	tctttacctaataagaact	...78...	ttgtccaaacag	ctccctcg
B.Tau	tcaagcag	gtatgttttct	..4833..	tagcttttgaattgtgagct	ATGAAAAGGTGCTT	tctttacctaataagaact	...78...	ttgtccaaacag	ctccctcg
E.Cab	tcaagcag	gtatgtccttg	..4833..	tagcttctgaattgtgagct	ATGAAAAGGTGCTT	tctttacctaataagaact	...78...	ttgtccaaacag	ctccctcg
S.Sus	ccaagcag	gtatgttttg	..4833..	tagcttctgaattgtgagct	ATGAAAAGGTGCTT	tctttacctaataagaact	...78...	ttgtccaaacag	ctccctcg
L.Afr	tcaagcag	gtatgttttg	..4833..	tagcttctgaattgtgagct	ATGAAAAGGTGCTT	tctttaccgtaataagaact	...78...	ttgtccaaacag	ctccctcg
	*****	*** *		* ** *	*****	* * *****		*****	*****

id=607582 gene=ENSG00000135333 name=EPHA7 segment=chr6_93982141_94066434_-1 type=IN

H.Sap	ctttcatt	gtaagtgtttg	..4303..	tcctgggctgactgcacaat	AAGTGCTT	gcTTCAT	cacagtcagctttcttacatcattacag	ttaaattt
P.Tro	ctttcatt	gtaagtgtttg	..4309..	tcctgggctgactgcacaat	AAGTGCTT	gcTTCAT	cacagtcagctttcttacatcattacag	gtaaattt
P.Abe	ctttcatt	gtaagtgtttg	..4672..	tcctgggctgactgcacaat	AAGTGCTT	gcTTCAT	cacagtcagctttcttacatcattacag	ttaaattt
C.Jac	ctttcatt	gtaagtgtttg	..4460..	tcctgggctgactgcacaat	AAGTGCTT	gcTTCAT	cacagtcagctttcttacatcattacag	ttaaattt
M.Mus	ctttcatt	gtaagtgtttg	..4072..	tcctgggctgactgcacaat	AAGTGCTT	gcTTCAT	cacagtcagctttcttacatcattacag	ttaaattt
R.Nor	ctttcatt	gtaagtgtttg	..4067..	tcctgggctgactgcacaat	AAGTGCTT	gcTTCAT	tcacagtcagctttcttacatcattacag	ttaaattt
C.Por	ctttcatt	gtaagtgtttg	..4119..	tcctgggctgactgcacaat	AAGTGCTT	gcTTCAT	cacagtcagctttcttacatcattacag	ttaaattt
O.Cun	ctttcatt	gtaagtgtttg	..4157..	tcctgggctgactgcacaat	AAGTGCTT	gcTTCAT	cacagtcagctttcttacatcattacag	ttaaattt
C.Fam	ctttcatt	gtaagtgtttg	..3806..	tcctgggctgactgcacaat	AAGTGCTT	gcTTCAT	cacagtcagctttcttacatcattacag	ttaaattt
B.Tau	ctttcatt	gtaagtgtttg	..4262..	tcctgggctgactgcacaat	AAGTGCTT	gcTTCAT	cacagtcagctttcttacatcattacag	ttaaattt
E.Cab	ctttcatt	gtaagtgtttg	..4264..	tcctgggctgactgcacaat	AAGTGCTT	gcTTCAT	cacagtcagctttcttacatcattacag	ttaaattt
S.Sus	ctttcatt	gtaagtgtttg	..4474..	tcctgggctgactgcacaat	AAGTGCTT	gcTTCAT	cacagtcagctttcttacatcattacag	ttaaattt
L.Afr	ctttcatt	gtaagtgtttg	..4384..	tcctgggctgactgcacaat	AAGTGCTT	gcTTCAT	cacagtcagctttcttacatcattacag	ttaaattt
	*****	*****		*****	*****	*****		*****

id=607590 gene=ENSG00000135333 name=EPHA7 segment=chr6_93969198_93973577_-1 type=IN VIEW

Figure 601:



H. Sap	ctttcatt	gtaagtgtttgg...4232...ttaaactgctgtgaatcag	GTGATGTGGAAGCAAGtt	CACT	gttccaaggagcactctgca---.62...acatcattacag	ttaaattt
R. Mac	ctttcatt	gtaagtgtttgg...4234...ttaaactgctgtgaatcag	GTGATGTGGAAGCAAGTT	acTGT	ccaaggagcactctgcataa...59...acatcattacag	ttaaattt
P. Tro	ctttcatt	gtaagtgtttgg...4238...ttaaactgctgtgaatcag	GTGATGTGGAAGCAAGtt	CACT	gttccaaggagcactctgca---.62...acatcattacag	ttaaattt
P. Abe	ctttcatt	gtaagtgtttgg...4601...ttaaactgctgtgaatcag	GTGATGTGGAAGCAAGtt	CACT	gttccaaggagcactctgca---.62...acatcattacag	ttaaattt
C. Jac	ctttcatt	gtaagtgtttgg...4389...ttaaactgctgtgaatcag	GTGATGTGGAAGCAAGtt	CACT	gttccaaggagcactctgca---.62...acatcattacag	ttaaattt
M. Mus	ctttcatt	gtaagtgtttgg...4001...ttaaactgctgtgaatcag	GTGATGTGGAAGCAAGtt	CACT	gttccaaggagcactctgca---.62...acatcattacag	ttaaattt
R. Nor	ctttcatt	gtaagtgtttgg...3996...ttaaactgctgtgaatcag	GTGATGTGGAAGCAAGtt	CACT	gttccaaggagcactctgca---.62...acatcattacag	ttaaattt
C. Por	ctttcatt	gtaagtgtttgg...4048...ttaaactgctgtgaatcag	GTGATGTGGAAGCAAGtt	CACT	gttccaaggagcactctgca---.62...acatcattacag	ttaaattt
O. Cun	ctttcatt	gtaagtgtttgg...4086...ttaaactgctgtgaatcag	GTGATGTGGAAGCAAGtt	CACT	gttccaaggagcactctgca---.62...acatcattacag	ttaaattt
C. Fam	ctttcatt	gtaagtgtttgg...3735...ttaaactgctgtgaatcag	GTGATGTGGAAGCAAGtt	CACT	gttccaaggagcactctgca---.62...acatcattacag	ttaaattt
B. Tau	ctttcatt	gtaagtgtttgg...4191...ttaaactgctgtgaatcag	GTGATGTGGAAGCAAGtt	CACT	gttccaaggagcactctgca---.62...acatcattacag	ttaaattt
E. Cab	ctttcatt	gtaagtgtttgg...4193...ttaaactgctgtgaatcag	GTGATGTGGAAGCAAGtt	CACT	gttccaaggagcactctgca---.62...acatcattacag	ttaaattt
S. Sus	ctttcatt	gtaagtgtttgg...4403...ttaaactgctgtgaatcag	GTGATGTGGAAGCAAGtt	CACT	gttccaaggagcactctgca---.62...acatcattacag	ttaaattt
L. Afr	ctttcatt	gtaagtgtttgg...4313...ttaaactgctgtgaatcag	GTGATGTGGAAGCAAGtt	CACT	gttccaaggagcactctgca---.62...acatcattacag	ttaaattt
	***** *	*****	** ****	*****	*****	*****

id=607590 gene=ENSG00000135333 name=EPHA7 segment=chr6_93969198_93973577_-1 type=IN

H. Sap	ctttcatt	gtaagtgtttgg...4304...----cctgggctgactgcacaata	AGTGc	TTTGCTTC	atCACAGTCAT	gctttcttacatcattacag	ttaaattt
R. Mac	ctttcatt	gtaagtgtttgg...4302...aattcctgggctgactgcac	AATAa	GGGCTTTGCTTC	atCACAGTCAT	gctttcttacatcattacag	ttaaattt
P. Tro	ctttcatt	gtaagtgtttgg...4310...----cctgggctgactgcacaata	AGTGc	TTTGCTTC	atCACAGTCAT	gctttcttacatcattacag	ttaaattt
P. Abe	ctttcatt	gtaagtgtttgg...4673...----cctgggctgactgcacaata	AGTGc	TTTGCTTC	atCACAGTCAT	gctttcttacatcattacag	ttaaattt
C. Jac	ctttcatt	gtaagtgtttgg...4461...----cctgggctgactgcacaata	AGTGc	TTTGCTTC	atCACAGTCAT	gctttcttacatcattacag	ttaaattt
M. Mus	ctttcatt	gtaagtgtttgg...4073...----cctgggctgactgcacaata	AGTGc	TTTGCTTC	atCACAGTCAT	gctttcttacatcattacag	ttaaattt
R. Nor	ctttcatt	gtaagtgtttgg...4068...----cctgggctgactgcacaata	AGTGc	TTTGCTTC	atCACAGTCAT	gctttcttacatcattacag	ttaaattt
C. Por	ctttcatt	gtaagtgtttgg...4120...----cctgggctgactgcacaata	AGTGc	TTTGCTTC	atCACAGTCAT	gctttcttacatcattacag	ttaaattt
O. Cun	ctttcatt	gtaagtgtttgg...4158...----cctgggctgactgcacaata	AGTGc	TTTGCTTC	atCACAGTCAT	gctttcttacatcattacag	ttaaattt
C. Fam	ctttcatt	gtaagtgtttgg...3807...----cctgggctgactgcacaata	AGTGc	TTTGCTTC	atCACAGTCAT	gctttcttacatcattacag	ttaaattt
B. Tau	ctttcatt	gtaagtgtttgg...4263...----cctgggctgactgcacaata	AGTGc	TTTGCTTC	atCACAGTCAT	gctttcttacatcattacag	ttaaattt
E. Cab	ctttcatt	gtaagtgtttgg...4265...----cctgggctgactgcacaata	AGTGc	TTTGCTTC	atCACAGTCAT	gctttcttacatcattacag	ttaaattt
S. Sus	ctttcatt	gtaagtgtttgg...4475...----cctgggctgactgcacaata	AGTGc	TTTGCTTC	atCACAGTCAT	gctttcttacatcattacag	ttaaattt
L. Afr	ctttcatt	gtaagtgtttgg...4385...----cctgggctgactgcacaata	AGTGc	TTTGCTTC	atCACAGTCAT	gctttcttacatcattacag	ttaaattt
	***** *	*****	*****	*****	*****	*****	*****

id=607590 gene=ENSG00000135333 name=EPHA7 segment=chr6_93969198_93973577_-1 type=IN VIEW

Figure 602:



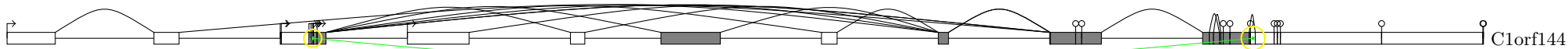
H.Sap	gGGTGGGG	GAGGAGGG	aaag	cggc
P.Tro	gGGTGGGG	GAGGAGGG	aaag	cggc
P.Abe	gGGTGGGG	GAGGAGGG	aaag	cggc
C.Jac	gGGTGGGG	GAGGAGGG	aaag	cggc
M.Mus	ggtTGGGG	GAGGAGGG	aaag	cggc
R.Nor	ggtTGGGG	GAGGAGGG	aaag	cggc
C.Por	ggtTGGGG	GAGGAGGG	caaag	cggc
O.Cun	gGGTGGGG	GAGGAGGG	aaag	cggc
C.Fam	gGGTGGGG	GAGGAGGG	aaag	cggc
F.Cat	gGGTGGGG	GAGGAGGG	agag	cggc
B.Tau	gGGTGGGG	GAGGAGGG	aaag	cggc
E.Cab	gGGTGGGG	GAGGAGGG	aaag	cggc
S.Sus	gGGTGGGG	GAGGAGGG	aaag	cggc
L.Afr	cGGTGGGG	GAGGAGGG	aaag	tggc
	* ****	*****	* **	***

id=320239 gene=ENSG00000055070 name=C1orf144 segment=chr1.16693730.16693737.1 type=AN

H.Sap	tg	atcc	CC	CTTg	CTCG	CCC	ACTgtgaccttg	aaccccat
P.Tro	tg	atcc	CC	CTTg	CTCG	CCC	ACTgtgaccttg	aaccccat
P.Abe	tg	atcc	CC	CTTg	CTCG	CCC	ACTgtgaccttg	aaccccat
C.Jac	tg	atccc	CC	CTTg	CTCG	CCC	ACTgtgaccttg	aaccctat
M.Mus	tg	atcc	CC	CTTg	CTCG	CCC	Actgtgaccttg	aaccccat
R.Nor	tg	atcc	CC	CTTg	CTCG	CCC	Actgtgaccttg	aaccccat
C.Por	tg	atccc	C	CTTg	CTCG	CCC	Actgtgaccttg	aaccccat
O.Cun	tg	atcc	CC	CTTg	CTCG	CCC	ACTgtgaccttg	aaccccat
C.Fam	tg	acc	CCC	TTg	CTCG	CCC	ACTgtgaccttg	aaccccat
F.Cat	tg	atc	CCC	TTg	CTCG	CCC	ACTgtgaccttg	aaccccat
B.Tau	tg	atc	CCC	TTg	CTCG	CCC	ACTgtgaccttg	aaccccat
E.Cab	tg	atc	CCC	TTg	CTCG	CCC	ACTgtgaccttg	aaccccat
S.Sus	tg	atc	CCC	TTg	CTCG	CCC	ACTgtgaccttg	aaccccat
L.Afr	tg	atcc	CC	CTTg	CTCG	CCC	ACTgtgaccttg	aaccccat
	**	*	****	*****	*****	*****	*	*** **

id=320267 gene=ENSG00000055070 name=C1orf144 segment=chr1.16721769.16721792.1 type=AN VIEW

Figure 603:



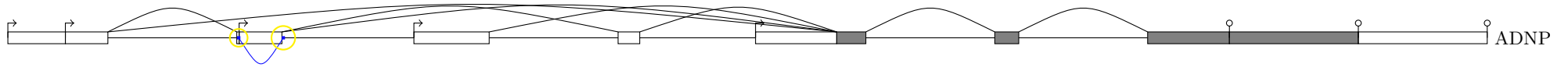
H.Sap	cgcgggga	gggGGTGGGG	GAGGAGGg
P.Tro	cgcgggga	gggGGTGGGG	GAGGAGGg
P.Abe	cgcgggga	gggGGTGGGG	GAGGAGGg
C.Jac	cgcgggga	gggGGTGGGG	GAGGAGGg
M.Mus	cgcgggga	ggggtTGGGG	GAGGAGGg
R.Nor	cgcgggga	ggggtTGGGG	GAGGAGGg
C.Por	cgcgggga	ggggtTGGGG	GAGGAGGc
O.Cun	cgcgggga	gg-GGTGGGG	GAGGAGGg
C.Fam	cgcgggga	gggGGTGGGG	GAGGAGGg
F.Cat	cgcgggga	gggGGTGGGG	GAGGAGGg
B.Tau	cgcacgga	gg-GGTGGGG	GAGGAGGg
E.Cab	cgcgggga	gagGGTGGGG	GAGGAGGg
S.Sus	cgcgggga	gggGGTGGGG	GAGGAGGg
L.Afr	cgCGGGGa	gCGGTGGGG	GAGGAGGg
	***	***	* * *****

id=320238 gene=ENSG0000055070 name=C1orf144 segment=chr1.16693720.16693729.1 type=AN

H.Sap	tg atccc	CTTgCTCG	CCCAC	Tgtgaccttg	aaccccat
P.Tro	tg atccc	CTTgCTCG	CCCAC	Tgtgaccttg	aaccccat
P.Abe	tg atccc	CTTgCTCG	CCCAC	Tgtgaccttg	aaccccat
C.Jac	tg atccc	CTTgCTCG	CCCAC	Tgtgaccttg	aaccctat
M.Mus	tg atccc	CTTgCTCG	CCCAct	Tgtgaccttg	aaccccat
R.Nor	tg atccc	CTTgCTCG	CCCAct	Tgtgaccttg	aaccccat
C.Por	tg atccc	CTTgCTCG	CCCAct	Tgtgaccttg	aaccccat
O.Cun	tg atccc	CTTgCTCG	CCCAC	Tgtgaccttg	aaccccat
C.Fam	tg accc	CTTgCTCG	CCCAC	Tgtgaccttg	aaccccat
F.Cat	tg atcc	CTTgCTCG	CCCAC	Tgtgaccttg	aaccccat
B.Tau	tg atcc	CTTgCTCG	CCCAC	Tgtgaccttg	aaccccat
E.Cab	tg atcc	CTTgCTCG	CCCAC	Tgtgaccttg	aaccccat
S.Sus	tg atcc	CTTgCTCG	CCCAC	Tgtgaccttg	aaccccat
L.Afr	tg atccc	CTTgCTCG	CCCAC	Tgtgaccttg	aaccccat
	** * ****	*****	*****	* ** **	**

id=320267 gene=ENSG0000055070 name=C1orf144 segment=chr1.16721769.16721792.1 type=AN VIEW

Figure 604:



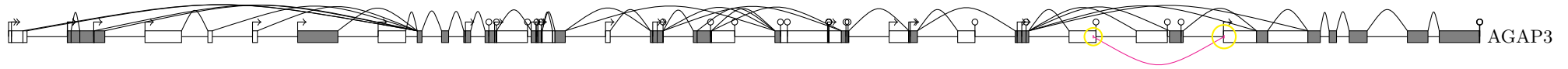
H.Sap	tTCCATaG	GTGTGAG	atgcacaatg
R.Mac	tTCCATaG	GTGTGAG	atgcacaatg
P.Tro	tTCCATaG	GTGTGAG	atgcacaatg
P.Abe	tTCCATaG	GTGTGAG	atgcacaatg
C.Jac	tTCCATaG	GTGTGAG	atgcacaatg
M.Mus	tTCCATaG	GTGTGAG	atgcacagta
R.Nor	tTCCATaG	GTGTGAG	atgcacagta
O.Cun	tTCCATaG	GTGTGAG	atgcacagtg
C.Fam	tTCCATaG	GTGTGAG	atgcacaatg
F.Cat	tTCCATaG	GTGTGAG	atgcacaatg
B.Tau	tTCCATaG	GTGTGAG	atgcacaatg
E.Cab	tTCCATaG	GTGTGAG	atgcacaatg
S.Sus	tTCCATaG	GTGTGAG	atgcacaatg
L.Afr	tTCCATaG	GTGTGAG	atgaacagtg
*****		*****	*** *

id=304202 gene=ENSG00000101126 name=ADNP segment=chr20_49545354_49545362_-1 type=A5

H.Sap	tgtgagat	gcacaatg	cgaa...125...tctttggaccacattgtcaa	TTCACACCg	GTGGGtat
R.Mac	tgtgagat	gcacaatg	cgaa...125...tctttggaccacattgtcaa	TTCACACCg	GTGGGtat
P.Tro	tgtgagat	gcacaatg	cgaa...125...tctttggaccacattgtcaa	TTCACACCg	GTGGGtat
P.Abe	tgtgagat	gcacaatg	cgaa...125...tctttggaccacattgtcaa	TTCACACCg	GTGGGtat
C.Jac	tgtgagat	gcacaatg	cgaa...125...tctttggaccacattgtcaa	TTCACACCg	GTGGGtat
M.Mus	tgtgagat	gcacagtac	gaa...125...tctttggactgcattgtcaa	TTCACACCg	GTGGGtat
R.Nor	tgtgagat	gcacagtac	gaa...125...tctttggactacattgtcaa	TTCACACCg	GTGGGtat
O.Cun	tgtgagat	gcacagtac	gaa...125...tctttggaccacattgtcaa	TTCACACCg	GTGGGtat
C.Fam	tgtgagat	gcacaatg	cgaa...124...tctttggaccacattgtcaa	TTCACACCg	GTGGGtat
F.Cat	tgtgagat	gcacaatg	cgaa...124...tctttggaccacattgtcaa	TTCACACCg	GTGGGtat
B.Tau	tgtgagat	gcacaatg	cgaa...124...tctttggaccacattgtcaa	TTCACACCg	GTGGGtat
E.Cab	tgtgagat	gcacaatg	cgaa...124...tctttggaccacattgtcaa	TTCACACCg	GTGGGtat
S.Sus	tgtgagat	gcacaatg	cgaa...124...tctttggaccacattgtcaa	TTCACACCg	GTGGGtat
L.Afr	tgtgagat	gaacagtgc	aaa...127...tctttggaccacattgtcag	TTCACACCg	GTGGGtat
*****		* * * * *	*****	*****	*****

id=304203 gene=ENSG00000101126 name=ADNP segment=chr20_49545188.49545353_-1 type=A5 VIEW

Figure 605:



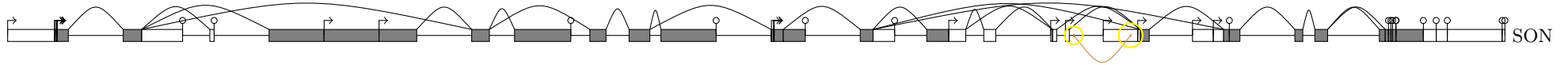
H. Sap	cttgacag	cagggagccaga...255...	gtaacatctcattatcttt	GTTACTGTAATTA	cattatccgctgctttatgcagaattatcctccga	ggactaat
R. Mac	cttgatgg	cagggagccaga...255...	gtaacatctcattatcttt	GTTACTGTAATTA	cattatccgctgctttatgcagaattatcctccga	ggactaat
P. Tro	cttgacgg	cagggagccaga...255...	gtaacatctcattatcttt	GTTACTGTAATTA	cattatccgctgctttatgcagaattatcctccga	ggactaat
P. Abe	cttgatgg	cagggagccaga...255...	gtaacatctcattatcttt	GTTACTGTAATTA	cattatccgctgctttatgcagaattatcctccga	ggactaat
C. Jac	cttgaggg	cagggagccaga...261...	gtaacatctcattatcttt	GTTACTGTAATTA	cattatccgctgctttatgcagaattatcctccga	ggactaat
M. Mus	ctcaaaga	tggatagtgaga...243...	gtaacatctcattatcttt	GTTACTGTAATTA	cattatccgctgctttatgcagaattatcctccga	ggactaat
R. Nor	cctttcct	cagagatgtgag...255...	gtaacatctcattatcttt	GTTACTGTAATTA	cattatccgctgctttatgcagaattatcctccga	ggactaat
C. Por	cttgattg	tggtagccagg...252...	gtaacatctcattatcttt	GTTACTGTAATTA	cattatccgctgctttatgcagaattatcctccga	ggactaat
O. Cun	cttgaagg	caggtagcaaga...220...	gtaacatctcattatcttt	GTTACTGTAATTA	cattatccgctgctttatgcagaattatcctccga	ggactaat
C. Fam	cttgaagt	caggtagcaaga...249...	gtaacatctcattatcttt	GTTACTGTAATTA	cattatccgctgctttatgcagaattatcctccga	ggactaat
B. Tau	cttgcagg	caggcagcagg...262...	gtaacatctcattatcttt	GTTACTGTAATTA	cattatccgctgctttatgcagaattatcctccga	ggactaat
E. Cab	tttgaagg	caggtggcaaga...271...	gtaacatctcattatcttt	GTTACTGTAATTA	cattatccgctgctttatgcagaattatcctccga	ggactaat
L. Afr	cctaaagg	cgggtggccaga...230...	gtaacatctcattatcttt	GTTACTGTAATTA	cattatccgctgctttatgcagaattatcctccga	ggactaat
		*		*****		*****

id=208358 gene=ENSG00000133612 name=AGAP3 segment=chr7_150833313_150833647_1 type=AN

H. Sap	c TAATTgA	CAGTAAT	taggcagctccctgattggt...372...	tcccctcaccag	ccagtggc
R. Mac	c TAATTgA	CAGTAAT	taggcagctccctgattggt...374...	tcccctcaccag	ccagtggc
P. Tro	c TAATTgA	CAGTAAT	taggcagctccctgattggt...372...	tcccctcaccag	ccagtggc
P. Abe	c TAATTgA	CAGTAAT	taggcagctccctgattggt...374...	tcccctcaccag	ccagtggc
C. Jac	c TAATTgA	CAGTAAT	taggcagctccctgattggt...374...	tcccctcaccag	ccagtggc
M. Mus	c TAATTgA	CAGTAAT	taggcagctccctgattggt...254...	tcccctcaccag	ccagtggc
R. Nor	c TAATTgA	CAGTAAT	taggcagctccctgattggt...268...	tcccctcaccag	ccagtggc
C. Por	c TAATTgA	CAGTAAT	taggcagctccctgattggt...297...	tcccctcccag	cgggtggc
O. Cun	c TAATTgA	CAGTAAT	taggcagctccctgattggt...349...	tcccctcaccag	ccagtggc
C. Fam	c TAATTgA	CAGTAAT	taggcagctccctgattggt...349...	tcccctcaccag	ccagtggc
B. Tau	c TAATTgA	CAGTAAT	taggcagctccctgattggt...203...	ctcccctcaccag	ccagtggc
E. Cab	c TAATTgA	CAGTAAT	taggcagctccctgattggt...352...	tcccctcaccag	ccagtggc
L. Afr	c TAATTgA	CAGTAAT	taggcagctccctgattggt...396...	ttcctgcaccag	ccagtggc
	*****	*****		** * ****	* ** *

id=208365 gene=ENSG00000133612 name=AGAP3 segment=chr7_150836655_150837065_1 type=AN VIEW

Figure 606: CS=10.14



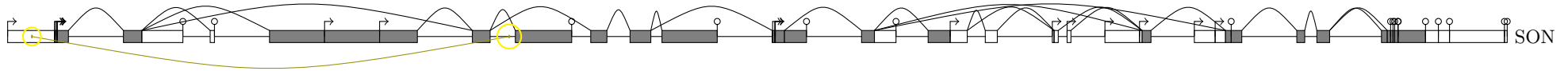
H. Sap	aaccagggtatgtttttacctccacagctgcctcc	TTCCATCAGAGCA	ccttgatgaacttaatgtct...236...-atatttgtaag	agaacata
R. Mac	aaccagggtatgtttttacctccacagctgcctcc	TTCCATCAGAGCA	ccttgatgaacttaatgtct...223...tatatttggt-ag	agaacata
P. Tro	aaccagggtatgtttttacctccacagctgcctcc	TTCCATCAGAGCA	ccttgatgaacttaatgtct...230...-atatttgtaag	agaacata
P. Abe	aaccagggtatgtttttacctccacagctgcctcc	TTCCATCAGAGCA	ccttgatgaacttaatgtct...222...-atatttgtaag	agaacata
C. Jac	aaccagggtatgtttttacctccacagctgcctcc	TTCCATCAGAGCA	ccttgatgaacttaatgtct...218...tatattaggt-ag	agaacata
R. Nor	aaccagggtgtgtttttacctctagagctgcctcc	TTCCATCAGAGCA	ccttggtgaacttaatgtct...163...gatacttggc-ag	agagcatt
C. Por	aaccagggtatgtttttacctccacagctgcctcc	TTCCATCAGAGCA	ccttggtgaacttaatgtca...194...tctgtctgct-ag	agaacagt
O. Cun	aaccagggtatgtttttacctctacagctgcctcc	TTCCATCAGAGCA	cctttttaacttaatgtct...196...tatatttgct-ag	agaatata
C. Fam	aaccagggtatgtttttacctccacagctgcctcc	TTCCATCAGAGCA	ccttggtgaacttaatgtct...211...tatatttgct-ag	agaacata
F. Cat	aaccagggtatgtttttacctccacagctgcctcc	TTCCATCAGAGCA	cctagttgacttaatgtct...202...tatatttgct-ag	agaacata
B. Tau	aaccagggtatgtttttacctccacagctgcctcc	TTCCATCAGAGCA	ccttggtgaacttaatgtct...190...tacatttgct-ag	agaatgta
E. Cab	aaccagggtatgtttctacctccacagctgcctcc	TTCCATCAGAGCA	ccttggtgaacttaatgtct...208...tatgtttgct-ag	agaatata
O. Avi	aaccagggtatgtttttacctccacagctgcctcc	TTCCATCAGAGCA	ccttggtgaacttaatgtct...218...tacatttgct-ag	agaatgta
L. Afr	aaccagggtctgtttttacctccacagctgcctcc	TTCCATCAGAGCG	tctcgttgaacttaatgtct...185...agttaagct-ag	agaattaa
	*****	* **	*****	* **

id=73037 gene=ENSG00000159140 name=SON segment=chr21_34944210_34944518.1 type=IN

H. Sap	ttgtaag	agaacataaaaa...203...taggacattaagtggtttgc	TGCTTTGATGGAA	attatggttcagtggttgg...34...tgaactttcacc	cctctgta
R. Mac	tttgtag	agaacataaaaa...199...taggacattaagtggtttgc	TGCTTTGATGGAA	attatggttcagtggttgg...34...tgaactttcacc	cctctgta
P. Tro	ttgtaag	agaacataaaaa...201...taggacattaagtggtttgc	TGCTTTGATGGAA	attatggttcagtggttgg...34...tgaactttcacc	cctctgta
P. Abe	ttgtaag	agaacataaaaa...201...taggacattaagtggtttgc	TGCTTTGATGGAA	attatggttcagtggttgg...34...tgaactttcacc	cctctgta
C. Jac	ttagtag	agaacataaaaa...201...taggacattaagtggtttgc	TGCTTTGATGGAA	attatggttcagtggttgg...34...tgaactttcacc	cctctgta
R. Nor	cttgtag	agaacataaaaa...207...taggacattaagtggtttgc	TGCTTTGATGGAA	attatggttcagtggttgg...34...tgaactttcacc	cctctgta
C. Por	tctgtag	agaacataaaaa...207...taggacattaagtggtttgc	TGCTTTGATGGAA	attatggttcagtggttgg...34...tgaactttcacc	cctctgta
O. Cun	tttgtag	agaacataaaaa...188...taggacattaagtggtttgc	TGCTTTGATGGAA	attatggttcagtggttgg...34...tgaactttcacc	cctctgta
C. Fam	tttgtag	agaacataaaaa...194...taggacattaagtggtttgc	TGCTTTGATGGAA	attatggttcagtggttgg...34...tgaactttcacc	cctctgta
F. Cat	tttgtag	agaacataaaaa...198...taggacattaagtggtttgc	TGCTTTGATGGAA	attatggttcagtggttgg...34...tgaactttcacc	cctctgta
B. Tau	tttgtag	agaacataaaaa...205...taggacattaagtggtttgc	TGCTTTGATGGAA	attatggttcagtggttgg...34...tgaactttcacc	cctctgta
E. Cab	tttgtag	agaacataaaaa...203...taggacattaagtggtttgc	TGCTTTGATGGAA	attatggttcagtggttgg...34...tgaactttcacc	cctctgta
O. Avi	tttgtag	agaacataaaaa...206...taggacattaagtggtttgc	TGCTTTGATGGAA	attatggttcagtggttgg...34...tgaactttcacc	cctctgta
L. Afr	aatgtag	agaacataaaaa...193...taggacattaagtggtttgc	TGCTTTGATGGAA	attatggttcagtggttgg...34...tgaactttcacc	cctctata
	* **	***	** *****	*****	***** **

id=73038 gene=ENSG00000159140 name=SON segment=chr21_34944519_34944832.1 type=AN VIEW

Figure 607: CS=8.4



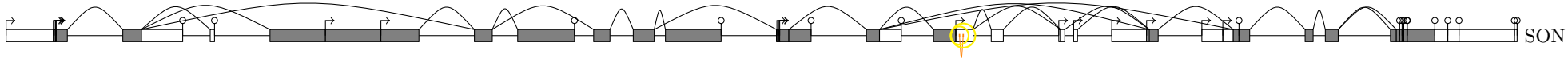
H. Sap	aaaatt-ct	ctccccggatgca...167...-----acggtcgcctc--aagagagac	GGCTCCTGTAATGG	cgCCTGG	gtcagacactaacatggcgg...174...cgaggcatgctg	ggagcctg	
R. Mac	aagatt-tt	ctccccggatgca...170...-----gtcgcctc--aagagagac	TCCTGTAATGG	cgCCTGG	gtcagacactaacatggcgg...174...cgaggcatgctg	ggagcctg	
P. Tro	aaaatt-ct	ctccccggatgca...167...-----acggtcgcctc--aagagagac	GGCTCCTGTAATGG	cgCCTGG	gtcagacactaacatggcgg...174...cgaggcatgctg	ggagcctg	
P. Abe	aaaatt-ct	ctccccggatgca...165...----acacagtcgcctc--gagagac--	AGCTCCTGTAATGG	cgCCTGG	gtcagacactaacatggcgg...174...cgaggcatgctg	ggagcctg	
C. Jac	ataatt-ct	ttccccggatgca...167...-----ccgactc--aagagagacggcg	CCTGTAATGG	cgCCTGG	gtcagacactaacatggcgg...174...cgaggcatgctg	ggagcctg	
M. Mus	ggattt-ct	ttctcatgcacg...190...-----gtcgcctc--gggagcgacttc	TCCTGTAATGG	cgCCTGG	gtcaaccactaacatggcgg...174...cgaggcatgctg	ggagcctg	
R. Nor	gaattt-ct	ttctcatgcagg...180...-----tcatctc--cgggagcgccttc	TCCTGTAATGG	cgCCTGG	gtcaaacactaacatggcgg...175...cgaggcatgctg	ggagcctg	
C. Por	gtatgt-ct	tcaatagacgcc...160...aagtcaaaagtctctc--aac--	AGCTA	TCCTGTAATGG	cgCCTGG	gtcagacactaacatggcgg...174...ctacgcatgctg	ggagcctg
C. Fam	ttaatgctt	tttccggatgt...172...-----gtcgcctc--aggagagacttc	TCCTGTAATGG	cgCCTGG	gtcagcactaacatggcgg...174...cgaggcatgctg	ggagcctg	
F. Cat	ttaatg-gt	tttccggatcca...168...-----gcccctc--aagagacgcttc	TCCTGTAATGG	cgCCTGG	gtcagcactaacatggcgg...174...cgaggcatgctg	ggagcctg	
B. Tau	aatatg-ct	ttccccggaggga...163...-----gccacctc--gagagagacttc	TCCTGTAATGG	cgCCTGG	gtcagcactaacatggcgg...174...cgaggcatgctg	ggagcctg	
E. Cab	tgaatg-tt	ttcccagacgct...184...-----gtcgcctc--aacagagacttc	TCCTGTAATGG	cgCCTGG	gtcagcactaacatggcgg...174...cgaggcatgctg	ggagcctg	
O. Avi	aatgtg-ct	ttcccgaatgga...165...-----cacctcgagagagacttc	TCCTGTAATGG	cgCCTGG	gtcagcactaacatggcgg...173...cgaggcatgctg	ggagcctg	
L. Afr	cccgtg-ct	ttctcggatgcg...174...--gacacagtcgcctc--gggaga	GGTT	tcTCCTGTAATGG	cgCCTGG	gtcagacactaacatggcgg...174...cgaggcatgctg	ggagcctg
	* *						**** **

id=72993 gene=ENSG00000159140 name=SON segment=chr21_34914924_34915349_1 type=E5

H. Sap	taactgag	gtaagctagaca...128...agcggcagaagctctgttta	GCAGGCCATTAT	CGGG	atGGCT	aaagctccgctagct-aaaagttacttcccattacttttgctttccag	ttttagaa
R. Mac	taactgag	gtaagctagaca...128...agcggcagaagctctgttta	GCAGGCCATTAT	ccGGGA	atggcctaagctccgctagct-aaaagttacttcccattacttttgctttccag	ttttagaa	ttttagaa
P. Tro	taactgag	gtaagctagaca...128...agcggcagaagctctgttta	GCAGGCCATTAT	CGGG	atGGCT	aaagctccgctagct-aaaagttacttcccattacttttgctttccag	ttttagaa
P. Abe	taactgag	gtaagctagaca...128...agcggcagaagctctgttta	GCAGGCCATTAT	CGGG	atGGCT	aaagctccgctagct-aaaagttacttcccattacttttgctttccag	ttttagaa
C. Jac	taacggag	gtaagctagaca...127...agcggcagaagctctgttta	GCAGGCCATTAT	CGGG	atggcctaagctccgctagct-aaaagttacttcccattacttttgctttccag	ttttagaa	ttttagaa
M. Mus	taactgag	gtaagctagaca...128...agcggcagaagctctgttta	GCAGGCCATTAT	ccGGGA	atggcctaagctccgctagct-aaaagttacttcccattacttttgctttccag	ttttagaa	ttttagaa
R. Nor	taactgag	gtaagctagaca...128...agcggcagaagctctgttta	GCAGGCCATTAT	ccGGGA	atggcctaagctccgctagct-aaaagttacttcccattacttttgctttccag	ttttagaa	ttttagaa
C. Por	taactgag	gtaagctagaca...128...agcggcagaagctctgttta	GCAGGCCATTAT	ccGGGA	atggcctaagctccgctagct-aaaagttacttcccattacttttgctttccag	ttttagaa	ttttagaa
C. Fam	taactgag	gtaagctagaca...128...agcggcagaagctctgttta	GCAGGCCATTAT	ccGGGA	atggcctaagctccgctagct-aaaagttacttcccattacttttgctttccag	ttttagaa	ttttagaa
F. Cat	taactgag	gtaagctagaca...128...agcggcagaagctctgttta	GCAGGCCATTAT	ccGGGA	atggcctaagctccgctagct-aaaagttacttcccattacttttgctttccag	ttttagaa	ttttagaa
B. Tau	taactgag	gtaagctagaca...129...agcggcagaagctctgttta	GCAGGCCATTAT	ccGGGA	atggcctaagctccgctagct--aagttacttcccattacttttgctttccag	ttttagaa	ttttagaa
E. Cab	taactgag	gtaagctagaca...128...agcggcagaagctctgttta	GCAGGCCATTAT	ccGGGA	atggcctaagctccgctagct-aaaagttacttcccattacttttgctttccag	ttttagaa	ttttagaa
O. Avi	taactgag	gtaagctagaca...129...agcggcagaagctctgttta	GCAGGCCATTAT	ccGGGA	atggcctaagctccgctagct--aagttacttcccattacttttgctttccag	ttttagaa	ttttagaa
L. Afr	taactgag	gtaagctaaaca...128...agcggcagaagctctgttta	GCAGGCCATTAT	ccGGGA	atggcctaagctccgctagct-aaaagttacttcccattacttttgctttccag	ttttagaa	ttttagaa
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id=73010 gene=ENSG00000159140 name=SON segment=chr21_34929623_34929851_1 type=IN VIEW

Figure 608: CS=6.72



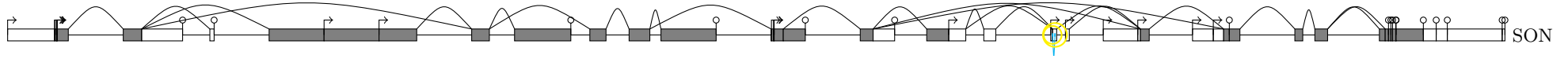
H. Sap	tggtgaag	g-----ggatgggatggagattaa-----	TCTGTGGAC	CACCA	Attaggccttagtggcctct...90...	tgctacgaagat	gtaggtgc-
R. Mac	tggtgaag	g-----ggatgggatggagattaa-----	TCTGTGGAC	CACCA	Attaggccttagtggcctct...90...	tgctacgaagat	gtaggtgc-
P. Tro	tggtgaag	g-----ggatgggatggagattaa-----	TCTGTGGAC	CACCA	Attaggccttagtggcctct...90...	tgctacgaagat	gtaggtgc-
P. Abe	tggtgaag	g-----ggatgggatggagattaa-----	TCTGTGGAC	CACCA	Attaggccttagtggcctct...89...	tgctacgaagat	gtaggtgc-
M. Mus	ttgtgaaa	gggggtggtaacaggggtgggatgg-gctggagataacta-	TCTGTGGAC	CACCA	Attaggccttagtggcctct...91...	tgctgcaagat	gta-gtgcg
R. Nor	-----	-----aacagggagggatgg-gctggagataacta-	TCTGTGGAC	CACCA	Attaggccttagtggcctct...91...	tgctgcaagat	gtaggtgc-
C. Por	tgctgaag	ggtggc-agaggggctggggaggggatgga-agtatta-	TCTGTGGAC	CACCA	catagggccttagtggcctct...83...	tgctgtgaagat	gtaggtgc-
O. Cun	tgctgacg	ggtggttaagggaggggtgagg-ggggatggaaagtact-	ATCTGTGGAC	CACCA	Attaggccttagtggcctct...91...	tgctacgaagat	gtaggtgc-
C. Fam	tggtgaag	g-----gggtgggggtggggctggaggatacaa-	TCTGTGGAC	CACCA	Attaggccttagtggcctct...107...	tgctgtgaagat	gtaggtgc-
F. Cat	tggtgaag	g-----gggcggagtggggatgggagaatgcta-	TCTGTGGAC	CACCA	Attaggccttagtggcctct...91...	tgctgtgaagat	gtaggtgc-
B. Tau	tgctgaag	ggtggcgaaatggctgggatgggggtgga-gaAGACTt	ATCTGTGGAC	CACCA	Attaggccttagtggcctct...91...	tgctgtgaagat	gtaggtgc-
E. Cab	tggtgaag	g-----gagtgggatgggatggagaataacta-	TCTGTGGAC	CACCA	Attaggccttagtggcctct...91...	tgctgtgaagat	gtaggtgc-
O. Avi	tgctgaag	ggtggcgaagattggctgggatgggggtgga-gaAGACTt	ATCTGTGGAC	CACCA	Attaggccttagtggcctct...91...	tgctgtgaagat	gtaggtgc-
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id=73029 gene=ENSG00000159140 name=SON segment=chr21.34942082.34942236.1 type=AN

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R. Mac	-----tggtgaag	ggga-tgggatggagatta-----atctgtggaccaccatttaggccttagtggcctc	TGGTGA	TCCACAGG	ctcaatttgagaaccactaa-----	...57...	tgctacgaagat	gtaggtgc-
P. Tro	-----tggtgaag	ggga-tgggatggagatta-----atctgtggaccaccatttaggccttagtggcctc	TGGTGA	TCCACAGG	ctcaatttgagaaccactaa-----	...57...	tgctacgaagat	gtaggtgc-
P. Abe	-----tggtgaag	ggga-tgggatggagatta-----atctgtggaccaccatttaggccttagtggcctc	TGGTGA	TCCACAGG	ctcaatttgagaaccactaa-----	...56...	tgctacgaagat	gtaggtgc-
M. Mus	ttgtgaaaggggtggttaa	cagggtgggatgg-gctggagataac-tatctgtggaccaccatttaggccttagtggcctc	TGGTGA	TCCACAGG	ctcaatttgagaaccactga-----	...58...	tgctgcaagat	gta-gtgcg
R. Nor	-----aa	caggagggatgg-gctggagataac-tatctgtggaccaccatttaggccttagtggcctc	TGGTGA	TCCACAGG	ctcaatttgagaaccactga-----	...58...	tgctgcaagat	gtaggtgc-
C. Por	tgctgaagggtggcagag	gggc-tgggaggggatgga-agtat-tatctgtggaccaccacatagggccttagtggcctc	TGGTGA	TCCACAGG	atcaatttgagaaccactga-----	...50...	tgctgtgaagat	gtaggtgc-
O. Cun	tgctgacgggtggttaagg	gagg-gtggagggggatggaaagtac-tatctgtggaccaccatttaggccttagtggcctc	TGGTGA	TCCACAGG	tcaatttgagaaccactgat-----	...57...	tgctacgaagat	gtaggtgc-
C. Fam	-----tggtgaag	gggg-tggggtggggctggaggatac-aatctgtggaccaccatttaggccttagtggcctc	TGGTGA	TCCACAGG	ctcaatttgagaaccactga-----	...74...	tgctgtgaagat	gtaggtgc-
F. Cat	-----tggtgaag	gggg-cggagtggggatggagaatgc-tatctgtggaccaccatttaggccttagtggcctc	TGGTGA	TCCACAGG	ctcaatttgagaaccactga-----	...58...	tgctgtgaagat	gtaggtgc-
B. Tau	tgctgaagggtggcgaag	ttggctgggatgggggtggagaagacttatctgtggaccaccatttaggccttagtggcctc	TGGTGA	TCCACAGG	tAGTTTgagaactactgattccgtga..	...50...	tgctgtgaagat	gtaggtgc-
E. Cab	-----tggtgaag	ggag-tgggatgggatggagaatac-tatctgtggaccaccatttaggccttagtggcctc	TGGTGA	TCCACAGG	ctcaatttgagaaccactga-----	...58...	tgctgtgaagat	gtaggtgc-
O. Avi	tgctgaagggtggcgaga	ttggctgggatgggggtggagaagacttatctgtggaccaccatttaggccttagtggcctc	TGGTGA	TCCACAGG	tAGTTTgagaactactgattccgtga..	...50...	tgctgtgaagat	gtaggtgc-
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id=73029 gene=ENSG00000159140 name=SON segment=chr21.34942082.34942236.1 type=AN VIEW

Figure 609: CS=7.8



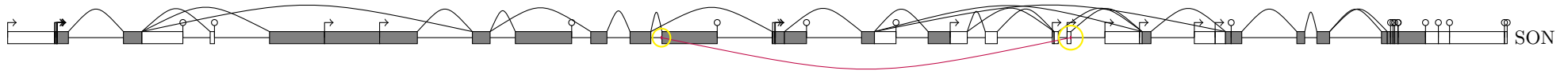
H. Sap	ctgcacag	ttgCCCTTTTTTTAG	GcGTGTtc
R. Mac	ctgcacag	ttgCCCTTTTTTTAG	GAGTGTTc
P. Tro	ctgcacag	ttgCCCTTTTTTTAG	GAGTGTTc
P. Abe	ctgcacag	ttgCCCTTTTTTTAG	GAGTGTTc
C. Jac	ctgcacag	ttgCCCTTTTTTTAG	GAGTGTTc
M. Mus	ctgtacag	ctgCCCTTTTTTTAG	GAGTGTTt
R. Nor	ctgtacag	ttgCCCTTTTTTTAG	GAGTGTTt
C. Por	ctgcacag	TTGCCCTTTTTTTAG	GAAttgtt
O. Cun	ctgcacag	TTGCCCTTTTTTTAG	GAGTGTA
C. Fam	ttgcacag	TTGCCCTTTTTTTAG	GAGTGTTg
F. Cat	ctgcacag	TTGCCCTTTTTTTAG	GAGTGTTg
B. Tau	ctgcacag	TTGCCCTTTTTTTAG	GAGTGTTt
E. Cab	ctgcacag	TTGCCCTTTTTTTAG	GAGTGTTt
O. Avi	ctgcacag	TTGCCCTTTTTTTAG	GAGTGTTt
L. Afr	ctgcacag	TTGCCCTTTTTTTAG	GAGTGTTt
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id=73033 gene=ENSG00000159140 name=SON segment=chr21_34944041_34944056_1 type=AN

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R. Mac	ttttttag	GAGTGTTCCCTGAAAAAGAGGG	acggatgaacctggaa	gtaagtaa
P. Tro	ttttttag	GAGTGTTCCCTGAAAAAGAGGG	acggatgaacctggaa	gtaagtaa
P. Abe	ttttttag	GAGTGTTCCCTGAAAAAGAGGG	acggatgaacctggaa	gtaagtaa
C. Jac	ttttttag	GAGTGTTCCCTGAAAAAGAGGG	acggatgaacctggaa	gtaagtaa
M. Mus	ttttttag	GAGTGtTCCTGAAAAAGAGGG	ggagatgaacctggaa	gtaagtaa
R. Nor	ttttttag	GAGTGtTCCTGAAAAAGAGGG	ggagatgaacctggaa	gtaagtaa
C. Por	ttttttag	gattgttTCCTGAAAAAGAGGGCAG	atgaacctggaa	gtaagtaa
O. Cun	ttttttag	gaGTGTATCCTGAAAAAGAGGGCGG	atgaacctggaa	gtaagtaa
C. Fam	ttttttag	gAGTGTgCCTGAAAAAGAGGGCGG	atgaacctggaa	gtaagtaa
F. Cat	ttttttag	gAGTGTgCCTGAAAAAGAGGGCGG	atgaacctggaa	gtaagtaa
B. Tau	ttttttag	GAGTGtTCCTGAAAAAGAGGGCGG	atgaacctgaaa	gtaagtaa
E. Cab	ttttttag	GAGTGtTCCTGAAAAAGAGGGCGG	atgaacctggaa	gtaagtaa
O. Avi	ttttttag	GAGTGtTCCTGAAAAAGAGGGCGG	atgaacctgaaa	gtaagtaa
L. Afr	ttttttag	GAGTGtTCCTGAAAAAGAGGGCGG	atgaacctggaa	gtaagtaa
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id=73034 gene=ENSG00000159140 name=SON segment=chr21_34944057_34944094_1 type=AN VIEW

Figure 610:



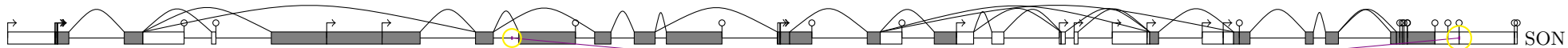
H. Sap	cctcagag	gtaagtaggagg...49...----	tatgttatgtctgatttga	TTCTGT	TTCAC	TCTT	cttag	ggccgggt
R. Mac	cctcagag	gtaagtaggagg...49...----	tattttatatctgatttga	TTCTGT	TTCAC	TCTT	cttag	ggccgggt
P. Tro	cctcagag	gtaagtaggagg...49...----	tattttatgtctgatttga	TTCTGT	TTCAC	TCTT	cttag	ggccgggt
P. Abe	cctcagag	gtaagtagaagg...49...----	tattttatgtctgatttga	TTCTGT	TTCAC	TCTT	cttag	ggccgggt
C. Jac	cctctgag	gtaagtaggagg...49...----	tattttatatctgatttga	TTCTGT	TTCAC	TCTT	cttag	ggccgggt
M. Mus	cctcagag	gtaagtaggagg...45...----	tattttatatctgatttga	TTCTGT	TTCAC	TCTT	cttag	ggccgggt
R. Nor	cctcagag	gtaagtaggagg...45...----	tattttatatctgatttga	TTCTGT	TTCAC	TCTT	cttag	ggccgggt
C. Por	cctcagag	gtaagtaaaaat...51...----	tactttatatctgatttga	TTCTGT	TTCAC	TCTT	cttag	ggccgggt
O. Cun	cctcagag	gtaagtaagagg...53...----	tactttatatctgatttga	TTCTGT	TTCAC	TCTT	cttag	ggccgggt
C. Fam	cctctgag	gtaagtaagagg...55...----	tactttatatctgatttga	TTCTGT	TTCAC	TCTT	cttag	ggccgggt
F. Cat	cctctgag	gtaagtaagagg...53...--	gttactttatatctgatttga	GGTTCTGT	TTCAC	TCTT	cttag	ggccgggt
B. Tau	cctctgag	gtaagtaagagg...48...----	tattttatatctgatttga	TTCTGT	TTCAC	TCTT	cttag	ggccgggt
E. Cab	cctctgag	gtaagtaaggaa...47...----	tattttatatctgatttga	TTCTGT	TTCAC	TCTT	cttag	ggccgggt
O. Avi	cctctgag	gtaagtaagagg...48...----	tattttatatctgatttga	TTCTGT	TTCAC	TCTT	cttag	ggccgggt
L. Afr	cctctgag	gtaagtaaaaagg...48...t	gtttattttatatctgatt	TGGATTCTGT	TTCAC	TCTT	cttag	ggccgggt
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id=73016 gene=ENSG00000159140 name=SON segment=chr21_34932082_34932182.1 type=IN

H. Sap	tctacact	gcatggcctgcaccaaata-	AGGAac	TGAAC	CAGGG	gtatgttt
R. Mac	tctacact	gcatggcctgcaccaaata-	AGGAac	TGAAC	CAGGG	gtatgttt
P. Tro	tctacact	gcatggcctgcaccaaata-	AGGAac	TGAAC	CAGGG	gtatgttt
P. Abe	tctacact	gcatggcctgcaccaaata-	AGGAac	TGAAC	CAGGG	gtatgttt
C. Jac	tctacact	gcatggcctgcaccaaata-	AGGAac	TGAAC	CAGGG	gtatgttt
M. Mus	tccacaat	gcatggcctgcaccaaata-	GAGGAac	TGAAC	CAGGG	gtatgttt
R. Nor	tcacaat	gcatggcctgcaccaaata-	AGGAac	TGAAC	CAGGG	gtatgttt
C. Por	tctacact	gcatggcctgcaccaaata-	AGGAac	TGAAC	CAGGG	gtatgttt
O. Cun	tctacact	gcatggcctgcaccaaata-	AGGAac	TGAAC	CAGGG	gtatgttt
C. Fam	tcaacact	gcatggcctgcaccaaata-	AGGAac	TGAAC	CAGGG	gtatgttt
F. Cat	tcaacact	gcatggcctgcaccaaata-	AGGAac	TGAAC	CAGGG	GTatgttt
B. Tau	tcaacact	gcatggcctgcaccaaata-	AGGAac	TGAAC	CAGGG	ctatgttt
E. Cab	tcaacact	gcatggcctgcaccaaata-	AGGAac	TGAAC	CAGGG	gtatgttt
O. Avi	tcaacact	gcatggcctgcaccaaata-	AGGAac	TGAAC	CAGGG	ctatgttt
L. Afr	tctacact	gcatggcctgcaccaaata-	AGGAac	TGAAC	CAGGG	GTCTGttt
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id=73036 gene=ENSG00000159140 name=SON segment=chr21_34944175_34944209.1 type=AN VIEW

Figure 611:



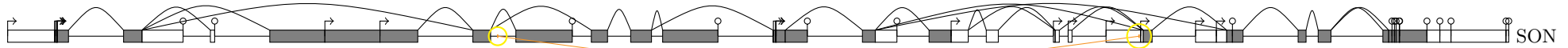
H.Sap	taactgag	gtaagctagaca...120...	gatgtggcagcggcagaagc	TCTGTTTAGCAGGCCATT	--atccgggatggctaagctcc...	27...	tttgctttccag	ttttagaa
R.Mac	taactgag	gtaagctagaca...120...	gatgtggcagcggcagaagc	TCTGTTTAGCAGGCCATT	--atccgggatggctaagctcc...	27...	tttgctttccag	ttttagaa
P.Tro	taactgag	gtaagctagaca...120...	gatgtggcagcggcagaagc	TCTGTTTAGCAGGCCATT	--atccgggatggctaagctcc...	27...	tttgctttccag	ttttagaa
P.Abe	taactgag	gtaagctagaca...120...	gatgtggcagcggcagaagc	TCTGTTTAGCAGGCCATT	--atccgggatggctaagctcc...	27...	tttgctttccag	ttttagaa
C.Jac	taacggag	gtaagctagaca...119...	gatgtggcagcggcagaagc	TCTGTTTAGCAGGCCATT	--atccgggatggctaagctcc...	27...	tttgctttccag	ttttagaa
M.Mus	taactgag	gtaagctagaca...120...	gatgtggcagcggcagaagc	TCTGTTTAGCAGGCCATT	--atccgggatggctaagctcc...	28...	tttgctttccag	ttttagaa
R.Nor	taactgag	gtaagctagaca...120...	gatgtggcagcggcagaagc	TCTGTTTAGCAGGCCATT	--atccgggatggctaagctcc...	28...	tttgctttccag	ttttagaa
C.Por	taactgag	gtaagctggaca...120...	gatgtggcagcggcagaagc	TCTGTTTAGCAGGCCATT	--atccgggatggctaagctcc...	27...	tttgctttccag	ttttagaa
O.Cun	taactgag	gtaagctagaca...121...	gatgtggcagcggcagaagc	TCTGTTTAGCAGGCCATT	ttatccgggatggctaagct--	29...	tttgctttccag	ttttagaa
C.Fam	taactgag	gtaagctagaca...120...	gatgtggcagcggcagaagc	TCTGTTTAGCAGGCCATT	--atccgggatggctaagctcc...	27...	tttgctttccag	ttttagaa
B.Tau	taactgag	gtaagctagaca...121...	gacgtggcagcggcagaagc	TCTGTTTAGCAGGCCATT	--atccgggatggctaagctcc...	25...	tttgctttccag	ttttagaa
E.Cab	taactgag	gtaagctagaca...121...	gacgtggcagcggcagaagc	TCTGTTTAGCAGGCCATT	--atccgggatggctaagctcc...	27...	tttgctttccag	ttttagaa
O.Avi	taactgag	gtaagctagaca...121...	gacgtggcagcggcagaagc	TCTGTTTAGCAGGCCATT	--atccgggatggctaagctcc...	25...	tttgctttccag	ttttagaa
L.Afr	taactgag	gtaagctaaaca...120...	gacgtggcagcggcagaagc	TCTGTTTAGCAGGCCATT	--atccgggatggctaagctcc...	27...	tttgctttccag	ttttagaa
	**** **	***** **	** *****	*****	*****	*****	*****	*****

id=73010 gene=ENSG00000159140 name=SON segment=chr21_34929623_34929851_1 type=IN

H.Sap	tgtactat	gatgtaactccc...52...	-----	tgacacctgtacta-tttcac	AATGGgtTCTGCTGGAC	AGAtaatg
R.Mac	tgtactat	gatgtaactccc...52...	-----	tgacacctgtacta-tttcac	AATGGgtTCTGCTGGAC	AGAtactg
P.Tro	tgtactat	gatgtaactccc...52...	-----	tgacacctgtacta-tttcac	AATGGgtTCTGCTGGAC	AGAtaatg
P.Abe	tgtactat	gatgtaactccc...53...	-----	gcacctgtactat-tttcac	AATGGgtTCTGCTGGAC	AGAtaatg
C.Jac	tgtactat	gatgtaactccc...52...	-----	tgacacctgtacta-tttcac	AATGGgtTCTGCTGGAC	AGAtattg
M.Mus	tgtactat	gatgtaactccc...52...	-----	tgacacctgtacta-tttcac	AATGGgtTCTGCTGGAC	AGAtactg
R.Nor	tgtactat	gatgtaactccc...52...	-----	tgacacctgtacta-tttcac	AATGGgtTCTGCTGGAC	AGAtactg
C.Por	tgtactat	gatgtaactccc...53...	-----	tgacacctgtacta-tttcaa	AATGGgtTCTGCTGGAC	AGAtactg
O.Cun	tgtactat	gatgtaactccc...51...	-----	tgacacctgtacta-tttcac	AATGGgtTCTGCTGGAC	AGAtactg
C.Fam	tgtactat	gatgtaactccc...52...	-----	tgacacctgtacta-gttcac	AATGGgtTCTGCTGGAC	AGAtactg
B.Tau	tgtactat	gatgtaactccc...52...	-----	tgacacctgtacta-gttcac	AATGGgtTCTGCTGGAC	AGAtactg
E.Cab	tgtactat	gatataactccc...52...	-----	tgacacctgtacta-gttcac	AATGGgtTCTGCTGGAC	AGAtactg
O.Avi	tgtactat	gatgtaactccc...52...	-----	tgacacctgtacta-gttcac	AATGGgtTCTGCTGGAC	AGAtactg
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Figure 612:



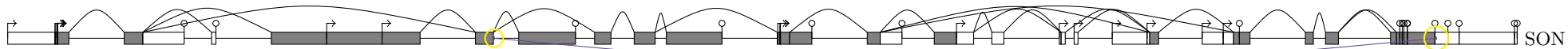
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R. Mac	taactgag	gtaagctagacagaatttg	ttttcattcttaa-atggattattccagtgat	GTTGac	TCTGGAGCG	tgcc-aaaaccggaattgtgg...	132...	tttgctttccag	ttttagaa
P. Tro	taactgag	gtaagctagacagaatttg	ttttcattcttaa-atggattattccagtgat	GTTGac	TCTGGAGCG	tgcc-aaaaccggaattgtgg...	132...	tttgctttccag	ttttagaa
P. Abe	taactgag	gtaagctagacagaatttg	ttttcattcttaa-atggattattccagtgat	GTTGac	TCTGGAGCG	tgcc-aaaaccggaattgtgg...	132...	tttgctttccag	ttttagaa
C. Jac	taacggag	gtaagctagacagaatttg	tttcattcttaa-atggattattccagtgat	GTTGac	TCTGGAGCG	tgcc-aaaaccggaattgtgg...	132...	tttgctttccag	ttttagaa
R. Nor	taactgag	gtaagctagacagaatttg	tttcattcttaa-atggattattccagtgat	CATGG	GTTGac	TCTGGAGCG	tgcc-aaaaccggaattgtgg...	133...	tttgctttccag
C. Por	taactgag	gtaagctggacagcatttg	ttgtcattcttaa-gtggattattccagggat	GTTGac	TCTGGAGCG	tgcc-aaaaccggaattgtgg...	132...	tttgctttccag	ttttagaa
O. Cun	taactgag	gtaagctagacagaatttg	tttcattcttaaagatggattactccagggat	GTTGac	TCTGGAGCG	tgcc-aaaaccggaattgtgg...	134...	tttgctttccag	ttttagaa
C. Fam	taactgag	gtaagctagacagaatttg	tttcattcttaa-atggattattccagtgat	GTTGac	TCTGGAGCG	tgcc-aaaaccggaattgtgg...	132...	tttgctttccag	ttttagaa
F. Cat	taactgag	gtaagctagacagaatttg	tttcattcttaa-gtggattattccagtgat	GTTGac	TCTGGAGCG	tgcc-aaaaccggaattgtgg...	132...	tttgctttccag	ttttagaa
B. Tau	taactgag	gtaagctagacagaatttg	ttttcattcttaa-atggattattccagtgat	GTTGac	TCTGGAGCG	tgcc-aaaaccggaattgtgg...	131...	tttgctttccag	ttttagaa
E. Cab	taactgag	gtaagctagacagaatttg	ttttcattcttaa-atggattattccagtgat	GTTGac	TCTGGAGCG	tgcc-aaaaccggaattgtgg...	132...	tttgctttccag	ttttagaa
O. Avi	taactgag	gtaagctagacagaatttg	ttttcattcttaa-atggattattccagtgat	GTTGac	TCTGGAGCG	tgcc-aaaaccggaattgtgg...	131...	tttgctttccag	ttttagaa
L. Afr	taactgag	gtaagctaacacagaatttg	ttttcattcttaa-atggattattccagtgat	GTTGac	TCTGGAGCG	tgcc-aaaaccggaattgtgg...	132...	tttgctttccag	ttttagaa
	**** *	*****	**** **	*****	*****	*****	*****	*****	*****

id=73010 gene=ENSG00000159140 name=SON segment=chr21_34929623_34929851_1 type=IN

H. Sap	ttgtaag	agaacataaaaa...	252...ttggatacaagagagatgac	TGTTCa	CAGAA	TAAC	ctgtgaactttcacc	cctctgta
R. Mac	tttgtag	agaacataaaaa...	248...ttggatacaagagagatgat	TGTTCa	CAGAA	TAAC	ctgtgaactttcacc	cctctgta
P. Tro	ttgtaag	agaacataaaaa...	250...ttggatacaagagagatgat	TGTTCa	CAGAA	TAAC	ctgtgaactttcacc	cctctgta
P. Abe	ttgtaag	agaacataaaaa...	250...ttggatacaagagagatgat	TGTTCa	CAGAA	TAAC	ctgtgaactttcacc	cctctgta
C. Jac	ttagtag	agaacataaaaa...	250...ttggatacaagagagatgat	TGTTCa	CAGAA	TAAC	ctgtgaactttcacc	cctctgta
R. Nor	ctggcag	agacattaacc...	256...ttggatacaagagagatgat	TGTTCa	CAGAA	TAACCTGTG	actttcacc	cctctgta
C. Por	tctgctag	agaacagtacc...	256...ttggatacaagagagatgat	TGTTCa	CAGAA	TAAC	ctgtgaactttcacc	cctctgta
O. Cun	tttgctag	agaatataatgcc...	237...ttggatacaagagagatgat	TGTTCa	CAGAA	TAAC	ctgtgaactttcacc	cctctgta
C. Fam	tttgctag	agaacataaatc...	243...ttggatacaagagagatgat	TGTTCa	CAGAA	TAAC	ctgtgaactttcacc	cctctgta
F. Cat	tttgctag	agaacataagtc...	247...ttggatacaagagagatgat	TGTTCa	CAGAA	TAAC	ctgtgaactttcacc	cctctgta
B. Tau	tttgctag	agaatgtaaatg...	254...ttggatacaagagagatgat	TGTTCa	CAGAA	TAAC	ctgtgaactttcacc	cctctgta
E. Cab	tttgctag	agaatataaatc...	252...ttggatacaagagagatgat	TGTTCa	CAGAA	TAAC	ctgtgaactttcacc	cctctgta
O. Avi	tttgctag	agaatgtacatg...	255...ttggatacaagagagatgat	TGTTCa	CAGAA	TAAC	ctgtgaactttcacc	cctctgta
L. Afr	aatgctag	agaatataaatg...	242...ttggatacaagagagatgat	TGTTCa	CAGAA	TAAC	ctgtgaactttcacc	cctctata
		* **	*****	*****	*****	*****	*****	*****

id=73038 gene=ENSG00000159140 name=SON segment=chr21_34944519_34944832_1 type=AN VIEW

Figure 613: CS=4.2



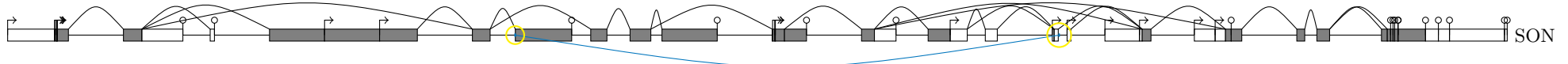
H.Sap	ta	ACTGAG	GTAAGC	tagacagaattg	ttttcat...191...	tttgctttccag	ttttagaa
R.Mac	ta	ACTGAG	GTAAGC	tagacagaattg	ttttcat...191...	tttgctttccag	ttttagaa
P.Tro	ta	ACTGAG	GTAAGC	tagacagaattg	ttttcat...191...	tttgctttccag	ttttagaa
P.Abe	ta	ACTGAG	GTAAGC	tagacagaattg	ttttcat...191...	tttgctttccag	ttttagaa
M.Mus	ta	ACTGAG	GTAAGC	tagacagattg	ttttccat...192...	tttgctttccag	ttttagaa
R.Nor	ta	ACTGAG	GTAAGC	tagacagaattg	ttttccat...192...	tttgctttccag	ttttagaa
C.Por	ta	ACTGAG	GTAAGC	tgacagcattg	ttgtcat...191...	tttgctttccag	ttttagaa
O.Cun	ta	ACTGAG	GTAAGC	tagacagaattg	ttttcat...194...	tttgctttccag	ttttagaa
C.Fam	ta	ACTGAG	GTAAGC	tagacagaattg	ttttcat...191...	tttgctttccag	ttttagaa
B.Tau	ta	ACTGAG	GTAAGC	tagacagaattg	ttttcat...190...	tttgctttccag	ttttagaa
E.Cab	ta	ACTGAG	GTAAGC	tagacagaattg	ttttcat...191...	tttgctttccag	ttttagaa
O.Avi	ta	ACTGAG	GTAAGC	tagacagaattg	ttttcat...190...	tttgctttccag	ttttagaa
L.Afr	ta	ACTGAG	GTAAGC	taaacagaattg	ttttcat...191...	tttgctttccag	ttttagaa
	*****		*****	*** ***** **		*****	*****

id=73010 gene=ENSG00000159140 name=SON segment=chr21_34929623_34929851_1 type=IN

H.Sap	ttatattG	TTTACCTTAGT	gatgtattg	tttaagtggc...74...	atTTgtactat	gatgtaac
R.Mac	ttatattG	TTTACCTTAGT	gatgtattg	tttaagtggc...74...	atTTgtactat	gatgtaac
P.Tro	ttatattG	TTTACCTTAGT	gatgtattg	tttaagtggc...74...	atTTgtactat	gatgtaac
P.Abe	ttatattG	TTTACCTTAGT	gatgtattg	tttaagtggc...74...	atTTgtactat	gatgtaac
M.Mus	ttatattG	TTTACCTTAGT	gatgtattg	tttaagtggc...72...	atTTgtactat	gatgtaac
R.Nor	ttatattG	TTTACCTTAGT	gatgtattg	tttaagtggc...72...	atTTgtactat	gatgtaac
C.Por	ttatattG	TTTACCTTAGT	gatgtattg	tttaagtggc...72...	atTTgtactat	gatgtaac
O.Cun	ttatattG	TTTACCTTAGT	gatgtattg	tttaagtggc...72...	atTTgtactat	gatgtaac
C.Fam	ttatattG	TTTACCTTAGT	gatgtattg	tttaagtggc...72...	atTTgtactat	gatgtaac
B.Tau	ttatattG	TTTACCTTAGT	gatgtattg	tttaagtggc...74...	atTTgtactat	gatgtaac
E.Cab	ttatattG	TTTACCTTAGT	gatgtattg	tttaagtggc...72...	atTTgtactat	gatataac
O.Avi	ttatattG	TTTACCTTAGT	gatgtattg	tttaagtggc...74...	atTTgtactat	gatgtaac
L.Afr	ttatattG	TTTACCTTAGT	gatgtattg	tttaagtggc...76...	ctTTgtactat	gctgtaac
	*****		*****	*****	*****	* * ***

id=73058 gene=ENSG00000159140 name=SON segment=chr21_34949071_34949187_1 type=EN VIEW

Figure 614:



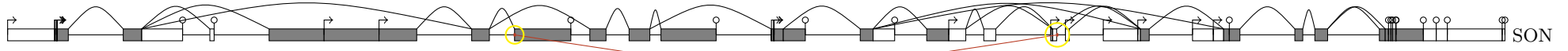
H.Sap	taactgag	gtaagctagaca...180...tagct-aaaagttacttccca	TTACtt	TTGCt	TTCCAG	ttttagaa
R.Mac	taactgag	gtaagctagaca...180...tagct-aaaagttacttccca	TTACtt	TTGCt	TTCCAG	ttttagaa
P.Tro	taactgag	gtaagctagaca...180...tagct-aaaagttacttccca	TTACtt	TTGCt	TTCCAG	ttttagaa
P.Abe	taactgag	gtaagctagaca...180...tagct-aaaagttacttccca	TTACtt	TTGCt	TTCCAG	ttttagaa
C.Jac	taacggag	gtaagctagaca...179...tagct-aaaagttacttccca	TTACtt	TTGCt	TTCCAG	ttttagaa
M.Mus	taactgag	gtaagctagaca...181...-agctaaaaagttacttccca	TTACtt	TTGCt	TTCCAG	ttttagaa
R.Nor	taactgag	gtaagctagaca...181...-agctaaaaagttacttccca	TTACtt	TTGCt	TTCCAG	ttttagaa
C.Por	taactgag	gtaagctggaca...180...tagct-aaaagttacttccca	TTACtt	TTGCt	TTCCAG	ttttagaa
O.Cun	taactgag	gtaagctagaca...183...cagct-aaaagttacttccca	TTACtt	TTGCt	TTCCAG	ttttagaa
C.Fam	taactgag	gtaagctagaca...180...tagct-aaaagttacttccca	TTACtt	TTGCt	TTCCAG	ttttagaa
F.Cat	taactgag	gtaagctagaca...180...tagct-aaaagttacttccca	TTACtt	TTGCt	TTCCAG	ttttagaa
E.Cab	taactgag	gtaagctagaca...180...tagct-aaaagttacttccca	TTACtt	TTGCt	TTCCAG	ttttagaa
L.Afr	taactgag	gtaagctaaca...180...tagct-aaaagttacttccca	TTACtt	TTGCt	TTCCAG	ttttagaa
	**** **	***** **	****	*****	*****	*****

id=73010 gene=ENSG00000159140 name=SON segment=chr21_34929623_34929851_1 type=IN

H.Sap	acCTGGAA	GTAAGTAA	aaagacattctaggtgtgtag-...40...tacatctacact	gcatggcc
R.Mac	acCTGGAA	GTAAGTAA	aaagacattctaggtgtgtag-...40...tacatctacact	gcatggcc
P.Tro	acCTGGAA	GTAAGTAA	aaagacattctaggtgtgtag-...40...tacatctacact	gcatggcc
P.Abe	acCTGGAA	GTAAGTAA	aaagacattctaggtgtgtag-...40...tacatctacact	gcatggcc
C.Jac	acCTGGAA	GTAAGTAA	aaagacattgtaggtgtgtag-...40...tacatctacact	gcatggcc
M.Mus	acCTGGAA	GTAAGTAA	agtcattctaggtgtgtagc...44...tacatccacaat	gcatggcc
R.Nor	acCTGGAA	GTAAGTAA	agtcattctaggtgtgtagc...46...tacatccacaat	gcatggcc
C.Por	acCTGGAA	GTAAGTAA	aaagtcattctaggtgtgtag-...45...tacatctacact	gcatggcc
O.Cun	acCTGGAA	GTAAGTAA	aaagtcattctaggtgtgtag-...46...tacatctacact	gcatggcc
C.Fam	acCTGGAA	GTAAGTAA	aaagtcattctaggtgtgtag-...45...tacatcaacact	gcatggcc
F.Cat	acCTGGAA	GTAAGTAA	aaagtcatttttaggtgtgtag-...45...tacatcaacact	gcatggcc
E.Cab	acCTGGAA	GTAAGTAA	aaagtcatttttaggtgtgtag-...44...tacatcaacact	gcatggcc
L.Afr	acCTGGAA	GTAAGTAA	aaatcattctaggtgtgtag-...45...aacatctacact	gcatggcc
	*****	***** *	**** *****	**** * *

id=73035 gene=ENSG00000159140 name=SON segment=chr21_34944095_34944174_1 type=IN VIEW

Figure 615:



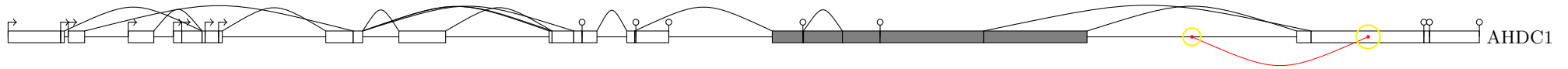
H.Sap	taactgag	gtaagctagaca...180...tagct-aaaagttacttccca	TTACTtTTGCTTCCAG	tTTTAgaa
R.Mac	taactgag	gtaagctagaca...180...tagct-aaaagttacttccca	TTACTtTTGCTTCCAG	tTTTAgaa
P.Tro	taactgag	gtaagctagaca...180...tagct-aaaagttacttccca	TTACTtTTGCTTCCAG	tTTTAgaa
P.Abe	taactgag	gtaagctagaca...180...tagct-aaaagttacttccca	TTACTtTTGCTTCCAG	tTTTAgaa
C.Jac	taacggag	gtaagctagaca...179...tagct-aaaagttacttccca	TTACTtTTGCTTCCAG	tTTTAgaa
M.Mus	taactgag	gtaagctagaca...181...-agctaaaaagttacttccca	TTACTtTTGCTTCCAG	tTTTAgaa
R.Nor	taactgag	gtaagctagaca...181...-agctaaaaagttacttccca	TTACTtTTGCTTCCAG	tTTTAgaa
C.Por	taactgag	gtaagctggaca...180...tagct-aaaagttacttccca	TTACTtTTGCTTCCAG	tTTTAgaa
O.Cun	taactgag	gtaagctagaca...183...cagct-aaaagttacttccca	TTACTtTTGCTTCCAG	tTTTAgaa
C.Fam	taactgag	gtaagctagaca...180...tagct-aaaagttacttccca	TTACTtTTGCTTCCAG	tTTTAgaa
F.Cat	taactgag	gtaagctagaca...180...tagct-aaaagttacttccca	TTACTtTTGCTTCCAG	tTTTAgaa
E.Cab	taactgag	gtaagctagaca...180...tagct-aaaagttacttccca	TTACTtTTGCTTCCAG	tTTTAgaa
L.Afr	taactgag	gtaagctaaca...180...tagct-aaaagttacttccca	TTACTtTTGCTTCCAG	tTTTAgaa
	**** **	***** **	**** *****	*****

id=73010 gene=ENSG00000159140 name=SON segment=chr21_34929623_34929851_1 type=IN

H.Sap	ttttttag	gcgtgttccctggaaaagagggacgga	TGAACCTGGAA	GTAAGTAa
R.Mac	ttttttag	gagtgttccctggaaaagagggacgga	TGAACCTGGAA	GTAAGTAa
P.Tro	ttttttag	gagtgttccctggaaaagagggacgga	TGAACCTGGAA	GTAAGTAa
P.Abe	ttttttag	gagtgttccctggaaaagagggacgga	TGAACCTGGAA	GTAAGTAa
C.Jac	ttttttag	gagtgttccctggaaaagagggacgga	TGAACCTGGAA	GTAAGTAa
M.Mus	ttttttag	gagtgttccctggaaaagaggggaga	TGAACCTGGAA	GTAAGTAa
R.Nor	ttttttag	gagtgttccctggaaaagaggggaga	TGAACCTGGAA	GTAAGTAa
C.Por	ttttttag	gattgttccctggaaaagagggcaga	TGAACCTGGAA	GTAAGTAa
O.Cun	ttttttag	gagtgttccctggaaaagagggcaga	TGAACCTGGAA	GTAAGTAa
C.Fam	ttttttag	gagtgttccctggaaaagagggcaga	TGAACCTGGAA	GTAAGTAa
F.Cat	ttttttag	gagtgttccctggaaaagagggcaga	TGAACCTGGAA	GTAAGTAa
E.Cab	ttttttag	gagtgttccctggaaaagagggcaga	TGAACCTGGAA	GTAAGTAa
L.Afr	ttttttag	gagtgttccctggaaaagagggcaga	TGAACCTGGAA	GTAAGTAa
	*****	* **	*****	*****

id=73034 gene=ENSG00000159140 name=SON segment=chr21_34944057_34944094_1 type=AN VIEW

Figure 616:



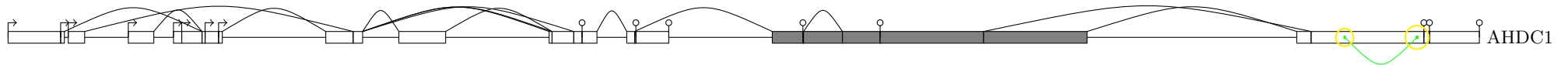
H. Sap	gttcctgg	gtgagtctgggg...4946...	ctcctgcctcttctcttg	TTCtt	TGCAG	CTT	tcaga
R. Mac	gttcctgg	gtgagtctgggg...4946...	ctcctgcctcttctcttg	TTCtt	TGCAG	CTT	tcaga
P. Tro	gttcctgg	gtgagtctgggg...4946...	ctcctgcctcttctcttg	TTCtt	TGCAG	CTT	tcaga
P. Abe	gttcctgg	gtgagtctgggg...4946...	ctcctgcctcttctcttg	TTCtt	TGCAG	CTT	tcaga
C. Jac	gttcctgg	gtgagtctgggg...4946...	ctcctgcctcttctcttg	TTCtt	TGCAG	CTT	tcaga
M. Mus	gttcctgg	gtaagtctgggg...4947...	-ttccgcctcttctcttg	TTCTT	TGCAG	CTT	tcaga
R. Nor	gttcctgg	gtaagtctgggg...4947...	-ttccgcctcttctcttg	TTCTT	TGCAG	CTT	tcaga
C. Por	gttcctgg	gtgagtctgggc...4946...	attctgccacttctcttg	TTCtt	TGCAG	CTT	tcaga
C. Fam	gttcctgg	gtgagtctgggg...4946...	cttctggctcttctcttg	TTCtt	TGCAG	CTT	tcaga
F. Cat	gttcctgg	gtgagtctgggg...4946...	taactctgcctcttcttg	TTCtt	TGCAG	CTT	tcaga
B. Tau	gttcctgg	gtgagtctgagg...4946...	cttctgcctcttctcttg	TTCtt	TGCAG	CTT	tcaga
E. Cab	gttcctgg	gtgagtctgggc...4946...	cttctgcctcttctcttg	TTCtt	TGCAG	CTT	tcaga
O. Avi	gttcctgg	gtgagtctgagg...4946...	gttttgcctcttctcttg	TTCtt	TGCAG	CTT	tcaga
L. Afr	gttcctgg	gtgagtctgggg...4946...	catctgccgttctcttg	TTCtt	TGCAG	CTT	tcaga
	*****	** ***** *		* ** *	*****	*****	*****

id=79521 gene=ENSG00000126705 name=AHDC1 segment=chr1_27861428_27873771_-1 type=IN

H. Sap	ctgcccct	ctgcctcccacc...229...	gaggtgtccagagcccctgc	AAGT	TGCA	ctGAGA	aatttatctacaggtcg	ttt...237...	caagtttgatt	aaaaagaa
R. Mac	ctgcccct	ctgcctcccacc...227...	gaggtgtccagagcccctgc	AAGT	TGCA	ctGAGA	aatttatctacaggtcg	ttt...237...	caagtttgatt	aaaaagaa
P. Tro	ctgcccct	ctgcctcccacc...219...	gaggtgtccagagcccctgc	AAGT	TGCA	ctGAGA	aatttatctacaggtcg	ttt...237...	caagtttgatt	aaaaagaa
P. Abe	ctgcccct	ctgcctcccact...1310...	gaggtgtccagagcccctgc	AAGT	TGCA	ctGAGA	aatttatctacaggtcg	ttt...237...	caagtttgatt	aaaaagaa
C. Jac	ctgcccct	ctgcctcccacc...218...	gaggtgtccagagcccctgc	AAGT	TGCA	ctGAGA	aatttatctacaggtcg	ttt...238...	caagtttgatt	aaaaagaa
M. Mus	ctgcccct	ctgcctcccacc...225...	gaggtgtccagagcccctgc	AAGT	TGCA	ctGAGAA	aatttatctacaggtcg	tttg...241...	caagtttgatt	aaaaagaa
R. Nor	ctgcccct	ctgcctcccacc...235...	gaggtgtccagagcccctgc	AAGT	TGCA	ctGAGAA	aatttatctacaggtcg	tttg...244...	caagtttgatt	aaaaagaa
C. Por	ctgcccct	ctgcctcccaca...214...	caggtgtccagagctcccgc	AAGT	TGCA	ctGAGA	aatttatctacaggtg	tgttt...242...	caagtttgatt	aaaaagaa
C. Fam	ctgcccct	ctgcctcccacc...224...	gaggtgtccagagcccctgc	AAGT	TGCA	ctGAGA	aatttatctacaggtcg	ttt...244...	caagtttgatt	aaaaagaa
F. Cat	ctgcccct	ctgcctcccgcc...223...	gaggtgtccagagcccctgc	AAGT	TGCA	ctGAGA	aatttatctacaggtcg	tgttt...244...	caagtttgatt	aaaaagaa
B. Tau	ctgcccct	ctgcctcccgcc...226...	acggtgtccagagcccctgc	AAGT	TGCA	ctGAGA	aatttatctacaggtg	tgttt...241...	caagtttgatt	aaaaagaa
E. Cab	ctgctcct	cttctcccctg...217...	aaggtgtccagagcccctgc	AAGT	TGCA	ctGAGA	aatttatctacaggtcg	tgttt...233...	caagtttgatt	aaaaagaa
O. Avi	ctgcccct	ctgcttctgct...228...	acagtgtccagagcccctgc	AAGT	TGCA	ctGAGA	aatttatctacaggtcg	tgttt...242...	caagtttgatt	aaaaagaa
L. Afr	ctgcccct	ctgcctcccacc...228...	gaggtgtccagagcccctgc	AAGT	TGCA	ctGAGA	aatttatctacaggtcg	tgttt...239...	caagtttgatt	aaaaagaa
	**** *	** * **	*****	** *	*****	*****	****	*****	*****	*****

id=79523 gene=ENSG00000126705 name=AHDC1 segment=chr1_27860814_27861358_-1 type=EN VIEW

Figure 617: CS=15.12



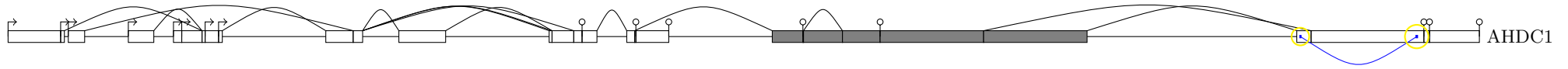
H.Sap	ctgccct	ctgcctcccacc...117...-----aaaatgtacaaaacttaa--	AACAAAACACAGT	tttagaaaaagacaaaaaa-----	...351...caagtttgatt	aaaaagaa
R.Mac	ctgccct	ctgcctcccacc...117...-----aaaatgtacaaaacttaa--	AACAAAACACAGT	tttagaaaaagacaaaaaa-----	...349...caagtttgatt	aaaaagaa
P.Tro	ctgccct	ctgcctcccacc...117...-----aaaatgtacaaaacttaa--	AACAAAACACAGT	tttagaaaaagacaaaaaa-----	...341...caagtttgatt	aaaaagaa
P.Abe	ctgccct	ctgcctcccact...1205...-----aaaatgtacaaaacttaa--	AACAAAACACAGT	tttagaaaaagacaaaaaa-----	...344...caagtttgatt	aaaaagaa
C.Jac	ctgccct	ctgcctcccacc...117...-----aaaatgtacaaaacttaa--	AACAAAACACAGT	tttagaaaaagacaaaaaa-----	...341...caagtttgatt	aaaaagaa
M.Mus	ctgccct	ctgcctcccacc...120...-----taaatgtacaaaacttaa--	AACAAAACACAGT	tttagaaaaagacaaaaaa-----	...349...caagtttgatt	aaaaagaa
R.Nor	ctgccct	ctgcctcccacc...119...-----taaatgtacaaaacttaa--	AACAAAACACAGT	tttagaaaaagacaaaaaa-----	...363...caagtttgatt	aaaaagaa
C.Por	ctgccct	ctgcctcccaca...111...-----aaaatgtacaaaacttaa--	AACAAAACACAGT	tttagaaaaagacaaaaaa-----	...347...caagtttgatt	aaaaagaa
O.Cun	ctgccct	ccacctccgcc...118...-----aaaatgtacaaaacttaa--	AACAAAACACAGT	tttagaaaaagacaaaaaa-----	...337...caagtttgatt	aaaaagaa
C.Fam	ctgccct	ctgcctcccacc...115...tttttaaaaatgtacaaaac--	TTAA AACAAAACACAGT	tttagaaaaagacaaaaaa-----	...350...caagtttgatt	aaaaagaa
F.Cat	ctgccct	ctgcctcccacc...113...tttttaaaaatgtacaaaac--	TTAA AACAAAACACAGT	tttagaaaaagacaaaaaa-----	...351...caagtttgatt	aaaaagaa
B.Tau	ctgccct	ctgcctcccacc...121...-----aaatgtacaaaacttaaaa	AACAAAACACAGT	tttagaaaaagacaaaaaa-----	...348...caagtttgatt	aaaaagaa
E.Cab	ctgctcct	cttctcccctg...113...-----aaaatgtacaaaacttaa--	AACAAAACACAGT	tttagaaaaagacaaaaaa-----	...339...caagtttgatt	aaaaagaa
O.Avi	ctgccct	ctgcttctgct...125...-----aaaatgtacaaaacttaaaa	AACAAAACACAGT	tttagaaaaagacaaaaaa-----	...347...caagtttgatt	aaaaagaa
L.Afr	ctgccct	ctgcctcccacc...123...-----aaaatgtacaaaacttaa--	AACAAAACACAGT	tttagaaaaagacaaaaaa-----	...346...caagtttgatt	aaaaagaa
	**** **	* * **	*****	* *****	*****	*****

id=79523 gene=ENSG00000126705 name=AHDC1 segment=chr1_27860814_27861358_-1 type=EN

H.Sap	ctgccct	ctgcctcccacc...464...---ttttctcttctgttgtgtt-----	GTTGTtGTTt	TGTT--ggcaggacacacccaagatccaagtttgatt	aaaaagaa
R.Mac	ctgccct	ctgcctcccacc...462...---ttttctcttctgttgtgtt-----	GTTGTtGTTt	TGTT--ggcaggacacacccaagatccaagtttgatt	aaaaagaa
P.Tro	ctgccct	ctgcctcccacc...454...---ttttctcttctgttgtgtt-----	GTTGTtGTTt	TGTT--ggcaggacacacccaagatccaagtttgatt	aaaaagaa
P.Abe	ctgccct	ctgcctcccact...1545...---ttttctcttctgttgtgtt-----	GTTGTtGTTt	TGTT--ggcaggacacacccaagatccaagtttgatt	aaaaagaa
C.Jac	ctgccct	ctgcctcccacc...454...---ttttctcttctgttgtgtt-----	GTTGTtGTTt	TGTT--ggcaggacacacccaagatccaagtttgatt	aaaaagaa
M.Mus	ctgccct	ctgcctcccacc...465...gggttttctcttctgttgtt-----	GTTGTtGTTt	TGTT--ggcaggacacacccaagatccaagtttgatt	aaaaagaa
R.Nor	ctgccct	ctgcctcccacc...478...gggttttctcttctgttgtt-----	GTTGTtGTTt	TGTT--ggcaggacacacccaagatccaagtttgatt	aaaaagaa
C.Por	ctgccct	ctgcctcccaca...454...tgggttttctcttctgttatt-----	GTTGTtGTTt	TGTT--ggcaggacacacccaagatccaagtttgatt	aaaaagaa
O.Cun	ctgccct	ccacctccgcc...451...---tttcaactcttgggtt-ttct	TTTGTtGTTt	TGTT--ggcaggacacacccaagatccaagtttgatt	aaaaagaa
C.Fam	ctgccct	ctgcctcccacc...464...gggttttctcttctgttgtt-----	GTTGTtGTTt	TGTTTGGcaggacacacccaagatccaagtttgatt	aaaaagaa
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id=79523 gene=ENSG00000126705 name=AHDC1 segment=chr1_27860814_27861358_-1 type=EN VIEW

Figure 618:



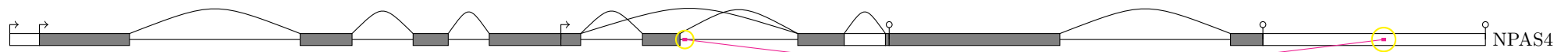
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P. Tro	ctttgcag	ctttCAGAAAACCAACG	ccaagatccctcccagcgtccacatcgtcctctggcaggagctcctgccct	ctgcctcc
P. Abe	ctttgcag	ctttCAGAAAACCAACG	ccaagatccctcccagcgtccacatcgtcctctggcaggagcgctgccct	ctgcctcc
C. Jac	ctttgcag	ctttCAGAAAACCAACG	ccaagatccctcccagcgtccacatcgtcctctggcaggatcgctgccct	ctgcctcc
C. Por	ctttgcag	ctttCAGAAAACCAACG	ccgagaccctcccagcatccaca-tgtcctctggcaggagcgctgccct	ctgcctcc
O. Cun	ctttgcag	ctttCAGAAAACCAACGcCAAGA	tcctcccagcgtccacatcgtcctctggcaggagcgctgccct	ccacctcc
C. Fam	ctttgcag	ctttCAGAAAACCAACG	ccaagaccctcccagtgccacattgtcctctggcaggagcgctgccct	ctgcctcc
F. Cat	ctttgcag	ctttCAGAAAACCAACG	ccaagaccctcccagcgtccacatcgtcctctggcaggagcgctgccct	ctgcctcc
B. Tau	ctttgcag	ctttCAGAAAACCAACG	ccaagaccctcccagtgccacatcgtcctcct-----ctgcctgccct	ctgcctcc
E. Cab	ctttgcag	ctttCAGAAAACCAACG	ccaagaccctcccagcgtccacatcctcctctggcaggagcgctgctcct	cttcctcc
O. Avi	ctttgcag	ctttCAGAAAACCAACG	ccaagaccctcccagcgtccacatcgtcctcct-----ctgcctgccct	ctgcctcc
L. Afr	ctttgcag	ctttCAGAAAACCAACA	ccaagaccctcccagcgtccacatcgtcctcctctggcaggaacacctgccct	ctgcctcc
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R. Mac	ctgcccct	ctgcctcccacc...461...--gttttctcttctgttgtgt-----	TGTTGttGTTTCTG	--ttggcaggacacacccaagatccaagtttgatt	aaaaagaa
P. Tro	ctgcccct	ctgcctcccacc...453...--gttttctcttctgttgtgt-----	TGTTGttGTTTCTG	--ttggcaggacacacccaagatccaagtttgatt	aaaaagaa
P. Abe	ctgcccct	ctgcctcccact...1544...--gttttctcttctgttgtgt-----	TGTTGttGTTTCTG	--ttggcaggacacacccaagatccaagtttgatt	aaaaagaa
C. Jac	ctgcccct	ctgcctcccacc...453...--gttttctcttctgttgtgt-----	TGTTGttGTTTCTG	--ttggcaggacacacccaagatccaagtttgatt	aaaaagaa
C. Por	ctgcccct	ctgcctcccaca...453...ttgggtttctcttctgttat-----	TGTTGttGTTTCTG	--ttggcaggacacacccaagatccaagtttgatt	aaaaagaa
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F. Cat	ctgcccct	ctgcctcccgc...462...tgggttttctcttctgttgt-----	TGTTGttGTTTCTG	tttggcaggacacacccaagatccaagtttgatt	aaaaagaa
B. Tau	ctgcccct	ctgcctcccgc...464...tgggttttctcttctgttgt-----	TGTTGttGTTTCTG	--ttggcaggacacacccaagatccaagtttgatt	aaaaagaa
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id=79523 gene=ENSG00000126705 name=AHDC1 segment=chr1_27860814_27861358_-1 type=EN VIEW

Figure 619:



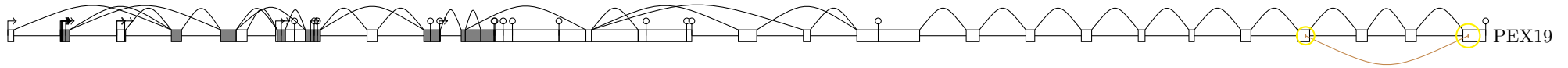
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P.Tro	ccgcCTGT	GTGaGTGTC	AGAG	aggctggggacaagatagca-----	..299...	ctttctccccag	tggtctgag
P.Abe	ccgcCTGT	GTGaGTGTC	AGAG	aggctggggacaagatagca-----	..299...	ctttctcctcag	tggtctgag
C.Jac	ccgcCTGT	GTGaGTGTC	AGAG	aggctggggacaagagaaca-----	..297...	ctttctccccag	tggtctgag
M.Mus	ccgcCTGT	GTGaGTGT	ccTGAGAGGCC	gtgcataaacacaggaagctg--	..276...	ttttctccccag	tggtctgaa
R.Nor	ccgcCTGT	GTGaGTGT	ccTGAGAGGCT	gcggata--acaggaaactggg...	..274...	ctttctccccag	tggtctgaa
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C.Fam	ccgcCTGT	GTGAGTGT	ccAGAG	aggctggggacaagacaggg-----	..290...	ctttccctcag	tggtctgag
B.Tau	ccgcTTGT	GTGaGTGTC	AGAG	aggctgagaaaaagacaggg-----	..303...	ctttccctcag	tggtctgaa
E.Cab	ccgcCTGT	GTGaGTGTC	AGAG	aagctggggacaagacaggg-----	..298...	ctttccattcag	tggtctgag
S.Sus	ccgcCTGT	GTGaGTGTC	AGAG	aggctggggacaagacaggg-----	..302...	ctttctccccag	tggtctgag
O.Avi	ccgcTTGT	GTGaGTGTC	AGAG	aggctgagaaaaagcaggg-----	..303...	ctttccctcag	tggtctgaa
L.Afr	ccgcCTGT	GTGaGTGTC	AGAG	aggccgggggaaggggtgcaa-----	..307...	cttctccccag	tggtctgag
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id=550945 gene=ENSG00000174576 name=NPAS4 segment=chr11.66190704.66191048.1 type=IN

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Figure 620: CS=6.72



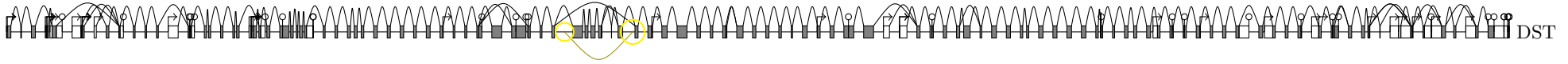
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R. Mac	cgtttcag	taaaaggcgtca...41...	gactgtgggcacatcttcct	CTGGGAGAA	TCATC	ctgccagattattcagttcatggaggggacaaggaggcgtg	gtgagtat
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M. Mus	catttcag	taaaaggcgtca...41...	gactgtgggcacatcttcct	CTGGGAGAA	TCATC	ctgccagattattcagttcatggaggggacaaggaggcgtg	gtgagtat
C. Por	catttcag	taaaaggcgtca...41...	gactgtgggcacatcttcct	CTGGGAGAA	TCATC	ctgtcagatcattcaattcatggaggggacaaggaggcgtg	gtaagtat
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E. Cab	catttcag	taaaaggcgtca...41...	gactgtgggcacatcttcct	CTGGGAGAA	TCATCC	ctgccagatcattcagttcatggaggggacaaggaggcgtg	gtgagtat
S. Sus	catttcag	taaaaggcgtca...41...	gactgtgggcacatcttcct	CTGGGAGAA	TCATC	ctgccagatcattcagttcatggaggggacaaggaggcgtg	gtgagtat
O. Avi	catttcag	taaaaggcgtca...41...	gactgtgggcacatcttcct	CTGGGAGAA	TCATC	ctgccagatcattcagttcatggaggggacaaggaggcgtg	gtgagtat
L. Afr	catttcag	taaaaggcgtca...41...	gactgtgggcacatcttcct	CTGGGAGAA	TCATC	ctgccagatcattcagttcatggaggggacaaggaggcgtg	gtaagtat

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P. Tro	aggagaag	gtaatattattt...629...-----gactatcctt---tgaagaa-gtct-	GTATGCTGTA AACATca	ATAGCATGGGGT	-ttgatactctctttcctgccc-----..360...tttccctttcag	ctggataa
P. Abe	aggagaag	gtaatattattt...632...-----gactatcctt---tgaagaa-gtct-	GTATGCTGTA AACATca	ATAGCATGGGGT	-ttgatactctctttcctgccc-----..360...tttccctttcag	ctggataa
C. Jac	aggagaag	gtaatattattt...640...-----tactgtcctt---cgaagaa-gtct-	GTATGCTGTA AACATca	ATAGCATGGGGT	-ttgatacactctttcctgccc-----..360...tttccctttcag	ctggataa
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id=600756 gene=ENSG00000151914 name=DST segment=chr6.56474143.56475224_-1 type=IN

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P. Abe	atcagaag	gtttgccctttc...1051...---tctcacctgtcagtttgt---	ACCCTAc	TGCTATc	ATGTTTACAGCATAc	-tataaaagcttat-tagaca---..81...tcttcacttttag	attgtagc
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M. Mus	atcagaag	gtttgccctctc...968...gtctgtc---ctgtctagtttgc---	CACTCCg	ATGCTACc	ATGTTTACAGCATAc	-caaaaagctttat-tcaggg---..77...tctccacttttag	gttgtggc
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C. Fam	atcagaag	gtttgccctttc...996...---tgctcacctgtcagtttgt---	ACCCGAc	TGCTATc	ATGTTTACAGCATAc	-tctgaaag-cttgc-aagatat...116...gcccccttttag	attgtggc
F. Cat	atcagaag	gtttgactttct...1035...ctgtgtcacctgtcagtttgt---	TGTTACCCCAc	TGCTATc	ATGTTTACAGCATAc	-tcagaaaactcttgc-aagata---..93...gcccccttttag	atcgtggc
B. Tau	atcagaag	gtctgcctttct...1028...---tgctca-ctgcctcagtttgc---	CCCCAc	TGCTATc	ATGTTTACAGCATAc	AG---tagggagccttatgtagacg---..74...tctccctttcag	ctgggtggc
E. Cab	accagaag	gtttgcttttct...958...---tgctcacctgtcagtttgt---	ACCCCAc	TGCTATc	ATGTTTACAGCATAc	ATAggaaaagctttgt-tgagg---..86...gctcccttttag	attgtggc
S. Sus	atcagaag	gtctgcctgtct...1146...-cgtgtca-ctgc-cagcgtgc---	ACCCCAc	TGCTATc	ATGTTTACAGCATAc	-ttgggaagcctgt-tagggg---..73...gctccctttcag	gtgggtggc
O. Avi	gtcgaat	tcttggtctttat...1000...---tgctca-ctgtcctcagtttgc---	CCCCAc	TGCTATc	ATGTTTACAGCATAc	AG---tagggagccttatgtagacg---..74...tctccctttcag	ctgggtggc
L. Afr	atcagaag	gtttgccctttc...1065...---tctcacctgtcagtttgt---	ACCCGAc	TGCTATc	ATGTTTACAGCATAc	-tgataaaagctttgt-ttagag---..80...gccccacttttag	attgtggc
	* **	** * * *	* **	*****	*****	*	** **

id=600769 gene=ENSG00000151914 name=DST segment=chr6.56465020.56466240_-1 type=IN VIEW

Figure 622: CS=9.6



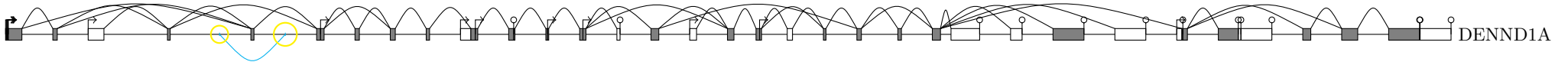
H. Sap	gtgaccag	gttcggaatgcg...4785...---	aatgaagtttgatcatgttt-----	ATTATTCTCaTGATTgACTG	cctggtactcctcccatgta-...119...	ttctctccacag	gaagttct
P. Tro	gtgaccag	gttcggaatgcg...4785...---	aatgaagtttgatcatgttt-----	ATTATTCTCaTGATTgACTG	cctggtactcctcccatgta-...119...	ttctctccacag	gaagttct
P. Abe	gtgaccag	gttcggaatgcg...4785...---	aatgaagtttgatcatgttt-----	ATTATTCTCaTGATTgACTG	cctggtactcctcccatgta-...119...	ttctctccacag	gaagttct
C. Jac	gtgaccag	gttcggaatgcg...4785...---	aatgaagtttgatcatgttt-----	ATTATTCTCaTGATTgACTG	cctggtactcctcccatgta-...119...	ttctctccacag	gaagttct
M. Mus	gtgaccag	gtttggaaatgcg...4770...---	taatfff--tcatttttaatgaAGTTTgATCATGtTTATtaTTTCTCaTGATTgACTG	cctggtactcctcccatgta-...119...	ttctctccacag	gaagttct	
R. Nor	gtgaccag	gtttggaaatgcg...4770...---	taatfff--tcatttttaatgaAGTTTgATCATGtTTATtaTTTCTCaTGATTgACTG	cctcatactcctcccatgta-...119...	ttctctccacag	gaagttct	
C. Por	gtgaccag	gttcggaatgcg...4785...---	aatgaagtttgatcatgttt-----	ATTATTCTCaTGATTgACTG	cctggtactcctcccatgta-...119...	ttctctccacag	gaagttct
O. Cun	gtgaccag	gttcggaatgcg...4785...---	aatgaagtttgatcatgttt-----	ATTATTCTCaTGATTgACTG	cctggtactcctcccatgta-...119...	ttctctccacag	gaagttct
C. Fam	gtgaccag	gttcggaatgcg...4786...---	aatgaagtttgatcatgttt-----	ATTATTCTCaTGATTgACTG	cctg-tactcctccctgtaa...118...	ttctctccacag	gaagttct
F. Cat	gtgaccag	gttcggaatgcg...4782...---	ttttaaagaagtttgatcat-----	GTTTATtaTTTCTCaTGATTgACTG	cctg-tactcctcccatgtaa...118...	ttctctccacag	gaagttct
B. Tau	gtgaccag	gttcggaatgcg...4785...---	aatgaagtttgatcatgttt-----	ATTATTCTCaTGATTgACTG	cctggtactcctcccatgta-...119...	ttctctccacag	gaagttct
L. Afr	gtgaccag	gttcggaatg...4770...---	taatfff--tcatttttaatgaAGTTTgATCATGtTTATtaTTTCTCaTGATTgACTG	cctggtactcctcccatgta-...119...	ttctctccacag	gaagttct	
	*****	*** ***** *	** *** ****	*****	***** ** ****	** * *****	*****

id=579920 gene=ENSG00000119522 name=DENND1A segment=chr9_126531843_126554865_-1 type=IN

H. Sap	acaagttc	gtaagtactggt...1396...	ccatttttccttcctttttcTAGTAATCAGAGAAgGTGAT	tctcgatggactgaaatcaa-----	...46...	ttttcatgcag	gcaaaaga
P. Tro	acaagttc	gtaagtactggt...1399...	ccatttttccttcctttttcTAGTAATCAGAGAAgGTGAT	tctcgacggactgaaatcaa-----	...46...	ttttcatgcag	gcaaaaga
P. Abe	acaagttc	gtaagtaatggt...1397...	ccatttttccttcctttttcTAGTAATCAGAGAAgGTGAT	tctcgacggactgaaatcaa-----	...46...	ttttcatgcag	gcaaaaga
C. Jac	acaagttc	gtaagtactggt...1405...	ccatttttccttcctttttcTAGTAATCAGAGAAgGTGAT	tctcgatggactgaaatcaa-----	...46...	ttttcatacag	gcaaaaga
M. Mus	acaagttt	gtaagtactggg...1410...	cattttttccttcgtttttcTAGTAATCAGAGAAgGTGAT	ttCATGGTGGACTgaaatcaagcatagaccgg...34...	ttttcatgcag	gcaaaaga	
R. Nor	acaagttt	gtaagtactggt...1351...	ccatttttccttcgtttttcTAGTAATCAGAGAAgGTGAT	ttCATGGTGGACTgaaatcaagcatagaccgg...34...	ttttcatgcag	gcaaaaga	
C. Por	acaagttc	gtaagtaccagt...1073...	ccatttttccttcctttttcTAGTAATCAGAGAAgGTGAT	tcacgacggactgaaatcaa-----	...46...	ttttcatgcag	gcaaaaga
O. Cun	acaagttc	gtaagtggcgct...924...	ccgtctccttcctttttcTAGTAATCAGAGAAgGTGAT	tcgcaatggactgaaatcaa-----	...46...	ttttcatgcag	gcaaaaga
C. Fam	ataagttt	gtgagtactggt...1110...	ccatttttccttcctttttcTAGTAATCAGAGAAgGTGAT	tcgcaacggattgaaatcaa-----	...46...	ttttcatgcag	gcaaaaga
F. Cat	ataagttt	gtgagtacgggt...1079...	ccatttgccttcctttttcTAGTAATCAGAGAAgGTGAT	tcacgacggatgaaatcaag-----	...45...	ttttcatgcag	gcaaaaga
B. Tau	ataagttc	gtaagtactggt...1077...	ccatttttccttcctttttcTAGTAATCAGAGAAgGTGAT	tcacgacggactgaaatcaa-----	...46...	ttttcatgcag	gcaaaaga
L. Afr	ataagttt	gtaagtactggt...1096...	ccatttttccttcctttttcTAGTAATCAGAGAAgGTGAT	ttCATGACGGACTgaaatcaagcctagtccctg...34...	ttttcatgcag	gcaaaaga	
	* *****	** ***	* * * **** * * *	*****	*** *****	***** **	***** *

id=579961 gene=ENSG00000119522 name=DENND1A segment=chr9_126213029_126214554_-1 type=IN VIEW

Figure 623: CS=3.6



H. Sap	gtgaccag	gttcgg	aatg	cg...	4870...	-----	tctgtc	tctc	tctt	cttt	cttt	ag	GGTAAAGT	tg	CTAGa	TTGTG	tgctgt	ggta	aatg	ttagat	...	35...	ttctct	ccacag	gaagt	tct		
R. Mac	gtgaccag	gttcgg	aatg	cg...	4870...	-----	tctgtc	tctc	tctt	cttt	cttt	ag	GGTAAAGT	tc	CTAGa	TTGTG	tgctgt	ggta	aatg	ttagat	...	35...	ttctct	ccacag	gaagt	tct		
P. Tro	gtgaccag	gttcgg	aatg	cg...	4870...	-----	tctgtc	tctc	tctt	cttt	cttt	ag	GGTAAAGT	tg	CTAGa	TTGTG	tgctgt	ggta	aatg	ttagat	...	35...	ttctct	ccacag	gaagt	tct		
P. Abe	gtgaccag	gttcgg	aatg	cg...	4870...	-----	tctgtc	tctc	tctt	cttt	cttt	ag	GGTAAAGT	tg	CTAGa	TTGTG	tgctgt	ggta	aatg	ttagat	...	35...	ttctct	ccacag	gaagt	tct		
C. Jac	gtgaccag	gttcgg	aatg	cg...	4870...	-----	tctgtc	tctc	tctt	cttt	cttt	ag	GGTAAAGT	tg	CTAGa	TTGTG	tgctgt	ggta	aatg	ttagat	...	35...	ttctct	ccacag	gaagt	tct		
M. Mus	gtgaccag	gtttgg	aatg	cg...	4870...	-----	tctgtc	tctc	tctt	ctta	ctta	ac	GGTAAAGT	tg	CTAGa	TTGTG	tgctgt	ggta	aatg	ttagat	...	35...	ttctct	ccacag	gaagt	tct		
R. Nor	gtgaccag	gtttgg	aatg	cg...	4865...	---	cttcat	ctgt	ctc	ctct	cttt	c	TTTAg	GGTAAAGT	tg	CTAGa	TTGTG	tgctgt	ggta	aatg	ttagat	...	35...	ttctct	ccacag	gaagt	tct	
C. Por	gtgaccag	gttcgg	aatg	cg...	4870...	-----	tctgtc	tctc	tctt	cttt	cttt	ag	GGTAAAGT	tg	CTAGa	TTGTG	tgctgt	ggta	aatg	ttagat	...	35...	ttctct	ccacag	gaagt	tct		
O. Cun	gtgaccag	gttcgg	aatg	cg...	4870...	-----	tctgtc	tctc	tctt	cttt	cttt	ag	GGTAAAGT	tg	CTAGa	TTGTG	tgctgt	ggta	aatg	ttagat	...	35...	ttctct	ccacag	gaagt	tct		
C. Fam	gtgaccag	gttcgg	aatg	cg...	4870...	-----	tctgtc	tctc	tctt	cttt	cttt	ag	GGTAAAGT	tg	CTAGa	TTGTG	tgctgt	ggta	aatg	ttagat	...	35...	ttctct	ccacag	gaagt	tct		
F. Cat	gtgaccag	gttcgg	aatg	cg...	4870...	-----	tctgtc	tctc	tctt	cttt	cttt	ag	GGTAAAGT	tg	CTAGa	TTGTG	tgctgt	ggta	aatg	ttagat	...	35...	ttctct	ccacag	gaagt	tct		
B. Tau	gtgaccag	gttcgg	aatg	cg...	4870...	-----	tctgtc	tctc	tctt	cttt	cttt	ag	GGTAAAGT	tg	CTAGa	TTGTG	tgctgt	ggta	aatg	ttagat	...	35...	ttctct	ccacag	gaagt	tct		
S. Sus	gtgaccag	gttcgg	aatg	cg...	4863...	---	ttctt	cat	ctg	ctc	ctct	ctt	TCTTT	ag	GGTAAAGT	tg	CTAGa	TTGTG	tgctgt	ggta	aatg	ttagat	...	35...	ttctct	ccacag	gaagt	tct
O. Avi	gtgaccag	gttcgg	aatg	cg...	4870...	-----	tctgtc	tctc	tctt	cttt	cttt	ag	GGTAAAGT	tg	CTAGa	TTGTG	tgctgt	ggta	aatg	ttagat	...	35...	ttctct	ccacag	gaagt	tct		
L. Afr	gtgaccag	gttcgg	aatg	atg...	4870...	-----	tctgtc	tctc	tctt	cttt	cttt	ag	GGTAAAGT	tg	CTAGa	TTGTG	tgctgt	ggta	aatg	ttagat	...	35...	ttctct	ccacag	gaagt	tct		
	*****	***	*****	*			*****	**	*****	*	*****	*****	*****	*****	*	*	*****	*	*****	*		**	*	*****	*****			

id=579920 gene=ENSG00000119522 name=DENND1A segment=chr9_126531843_126554865_-1 type=IN

H. Sap	gtggacag	gtagtgt	cagat	...	4888...	ttata	agtt	caac	gact	cat	TGTGATTAG	at	ACTTTATC	aaga	aact	tact	gcac	attc	at	ttt	ccc	ctt	gtt	ctg	cct	ttg	ctg	tcag
R. Mac	atggacag	gtagtgt	cagat	...	4888...	ttata	agtt	caac	gact	cat	TGTGATTAG	at	ACTTTATC	aaga	aact	tact	gcac	attc	at	ttt	ccc	ctt	gtt	ctg	cct	ttg	ctg	tcag
P. Tro	gtggacag	gtagtgt	cagat	...	4888...	ttata	agtt	caac	gact	cat	TGTGATTAG	at	ACTTTATC	aaga	aact	tact	gcac	attc	at	ttt	ccc	ctt	gtt	ctg	cct	ttg	ctg	tcag
P. Abe	gtggacag	gtagtgt	cagat	...	4888...	ttata	agtt	caac	gact	cat	TGTGATTAG	at	ACTTTATC	aaga	aact	tact	gcac	attc	at	ttt	ccc	ctt	gtt	ctg	cct	ttg	ctg	tcag
C. Jac	atggacag	gtagtgt	cagat	...	4888...	ttata	agtt	caac	gact	cat	TGTGATTAG	at	ACTTTATC	aaga	aact	tact	gcac	attc	at	ttt	ccc	ctt	gtt	ctg	cct	ttg	ctg	tcag
M. Mus	gtggacag	gtagtgt	cagat	...	4893...	----	ggtt	caat	gact	ttg	gtg	TTAG	at	ACTTTATC	tgga	aact	tag	cac	acatt	cat	ctc	ctc	ctt	gtt	ctg	ctt	ct	tacag
R. Nor	gtggacag	gtagtgt	cagat	...	4893...	----	ggtt	caat	gact	ttg	gtg	TTAG	at	ACTTTATC	TGGA	aact	tag	cac	acatt	cat	ctc	ctc	ctt	gtt	ctg	ctt	ct	ccacag
C. Por	gtggacag	gtagtgt	cagat	...	4888...	gtac	agtt	caac	gact	tgt	CGTGATTAG	at	ACTTTATC	aaga	aatt	tact	gct	cct	cat	ctc	ctc	ctt	gtt	ctg	ctt	g	ctg	tcag
O. Cun	gtggacag	gtagtgt	cagat	...	4888...	ttc	aggt	caac	gact	ttg	CGTGATTAG	at	ACTTTATC	aaga	ac	ctt	gct	gcac	attc	at	ttt	ccc	ctt	gtt	ctg	ctc	g	tcag
C. Fam	gtggacag	gtagtgt	cagat	...	4888...	ttac	agtt	caac	gact	ttg	CATGATTAG	at	ACTTTATC	aaga	aact	tatt	gcac	attc	at	ttt	ccc	ctt	gtt	ctc	ctt	g	tcag	
F. Cat	gtggacag	gtagtgt	cagat	...	4888...	ttac	agtt	caac	gact	ttg	CGTGATTAG	at	ACTTTATC	aaga	aact	cact	gcac	attc	g	ttt	ccc	ctt	gtt	ctc	ctt	g	tcag	
B. Tau	gtggacag	gtagt	atcagat	...	4890...	ttac	agtt	caac	gact	ttg	TGTGATTAG	at	ACTTTATC	agg	aact	tact	gcac	attc	at	ttt	ccc	ctt	gtt	ctc	ctt	g	tcag	
S. Sus	gtggacag	gtagtgt	cagat	...	4888...	ttac	agtt	caac	gact	ttg	TGTGATTAG	at	ACTTTATC	a	ggAGA	ctt	tact	gcac	attc	at	ttt	ccc	ctt	gtt	ctc	ctt	g	tcag
O. Avi	gtggacag	gtagt	atcagat	...	4890...	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	tcag
L. Afr	gtggacag	gtagtgt	cagat	...	4889...	ttac	agtt	caac	gact	ttg	CATGATTAG	at	ACTTTATC	aaga	ac	g	tact	gcac	attc	at	ttt	ccc	ctt	gtt	ctc	ctt	g	tcag
	*****	****	*****				*	*	*	*	*****	*****	*****	*	*	*	*****	*	*****	*		***	**	***	**	***		

id=579922 gene=ENSG00000119522 name=DENND1A segment=chr9_126520102_126531792_-1 type=IN VIEW

Figure 624: CS=10.5



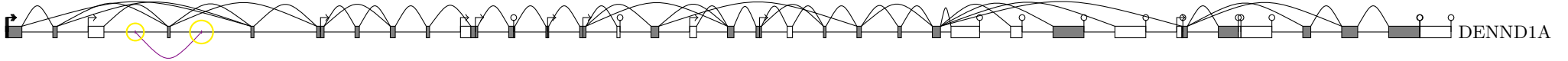
H. Sap	atactgag	gtgggttttgc...4870...gatcccctgccagggtgct	ATCATCTTCTGAT	caaatattaatgtgtgatcc...42...aattatttacag	atcctgag
P. Tro	atactgag	gtgggttttgc...4870...gatcccctgccagggtgct	ATCATCTTCTGAT	caaatattaatgtgtgatcc...42...aattatttacag	atcctgag
P. Abe	atactgag	gtgggttttgc...4870...gatcccctgccagggtgct	ATCATCTTCTGAT	caaatattaatgtgtgatcc...42...aattatttacag	atcctgag
C. Jac	atactgag	gtgggttttgc...4870...gatcccctgccagggtgct	ATCATCTTCTGAT	caaatattaatgtgtgatcc...42...aattatttacag	atcctgag
M. Mus	tcacagag	gtgggttttctg...4870...gatcccctgccagggtgct	ATCATCTTCTGAT	caaatattaatgtgtgatcc...42...aattatttacag	atcctgag
R. Nor	tatcagag	gtgggttttctg...4870...gatcccctgccagggtgct	ATCATCTTCTGAT	caaatattaatgtgtgatcc...42...aattatttacag	atcctgag
C. Por	ataccgag	gtgggttttgc...4870...gatcccctgccagggtgct	ATCATCTTCTGAT	caaatattaatgtgtgatcc...42...aattatttacag	atcctgag
O. Cun	atgccaag	gtgggttttgc...4870...gatcccctgccagggtgct	ATCATCTTCTGAT	caaatattaatgtgtgatcc...42...aattatttacag	atcctgag
C. Fam	atactgag	gtgggtgtgct...4870...gatcccctgccagggtgct	ATCATCTTCTGAT	caaatattaatgtgtgatcc...42...aattatttacag	atcctgag
F. Cat	cttctgag	gtgggtcgtgct...4871...-atcccctgccagggtgct	TCATCTTCTGAT	caaatattaatgtgtgatcc...42...aattatttacag	atcctgag
E. Cab	atactgag	gtgggttatgct...4870...gatcccctgccagggtgct	ATCATCTTCTGAT	caaatattaatgtgtgatcc...42...aattatttacag	atcctgag
L. Afr	atactgag	gtgggttggct...4870...gatcccctgccagggtgct	ATCATCTTCTGAT	caaatattaatgtgtgatcc...42...aattatttacag	accctgag
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id=579918 gene=ENSG00000119522 name=DENND1A segment=chr9_126554910_126560539_-1 type=IN

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P. Tro	acaagttc	gtaagtactggt...1404...tttccttcctttttctagta	ATCAGAGAAGGTGAT	tctcgacggactgaaatcaa...46...ttttcatgcag	gcaaaaga
P. Abe	acaagttc	gtaagtaatggt...1402...tttccttcctttttctagta	ATCAGAGAAGGTGAT	tctcgacggactgaaatcaa...46...ttttcatgcag	gcaaaaga
C. Jac	acaagttc	gtaagtactggt...1410...tttccttcctttttctagta	ATCAGAGAAGGTGAT	tctcgatggactgaaatcaa...46...ttttcatgcag	gcaaaaga
M. Mus	acaagttt	gtaagtactggg...1415...tttctctcgtttttctagta	ATCAGAGAAGGTGAT	tcatggtggactgaaatcaa...46...ttttcatgcag	gcaaaaga
R. Nor	acaagttt	gtaagtactggt...1356...tttctctcgtttttctagta	ATCAGAGAAGGTGAT	tcatggtggactgaaatcaa...46...ttttcatgcag	gcaaaaga
C. Por	acaagttc	gtaagtaccagt...1078...tttccttcctttttctagta	ATCAGAGAAGGTGAT	tcacgacggactgaaatcaa...46...ttttcatgcag	gcaaaaga
O. Cun	acaagttc	gtaagtggcgct...929...tctccttcctttttctagta	ATCAGAGAAGGTGAT	tcgcaatggactgaaatcaa...46...ttttcatgcag	gcaaaaga
C. Fam	ataagttt	gtgagtactggt...1115...tttccttcctttttctagta	ATCAGAGAAGGTGAT	tcgcaacggattgaaatcaa...46...ttttcatgcag	gcaaaaga
F. Cat	ataagttt	gtgagtacgggt...1084...tgtccttcctttttctagta	ATCAGAGAAGGTGAT	gtcaccgacgatgaaatca...47...ttttcatgcag	gcaaaaga
E. Cab	ataagttt	gtaagtacgggt...1098...tttccttcctttttctagta	ATCAGAGAAGGTGAT	ccgacggactgaaatcaa...46...ttttcatgcag	gcaaaaga
L. Afr	ataagttt	gtaagtactggt...1101...tttccttcctttttctagta	ATCAGAGAAGGTGAT	tcatgacggactgaaatcaa...46...ttttcatgcag	gcaaaaga
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id=579961 gene=ENSG00000119522 name=DENND1A segment=chr9_126213029_126214554_-1 type=IN VIEW

Figure 625: CS=3.6



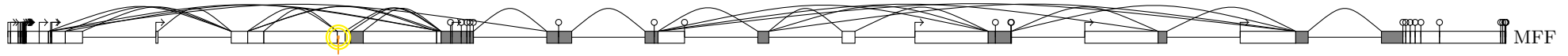
H. Sap	atactgag	gtgggtttttgc...4855...	cagctgcccccttggatcc	CCTGcCAGGGCTGCT	atcatcttctgatcaaatat...55...	aattatttacag	atcctgag
R. Mac	atactgag	gtgggtttttgc...4855...	cagctgcccccttggatcc	CCTGcCAGGGCTGCT	atcatcttctgatcaaatat...55...	aattatttacag	atcctgag
P. Tro	atactgag	gtgggtttttgc...4855...	cagctgcccccttggatcc	CCTGcCAGGGCTGCT	atcatcttctgatcaaatat...55...	aattatttacag	atcctgag
P. Abe	atactgag	gtgggtttttgc...4855...	cagctgcccccttggatcc	CCTGcCAGGGCTGCT	atcatcttctgatcaaatat...55...	aattatttacag	atcctgag
C. Jac	atactgag	gtgggtttttgct...4855...	cagctgcccccttggatcc	CCTGcCAGGGCTGCT	atcatcttctgatcaaatat...55...	aattatttacag	atcctgag
M. Mus	tcacagag	gtgggtttttctg...4855...	cagctgcccccttggatcc	CCTGcCAGGGCTGCT	atcatcttctgatcaaatat...55...	aattatttacag	atcctgag
R. Nor	tatcagag	gtgggtttttctg...4855...	cagctgcccccttggatcc	CCTGcCAGGGCTGCT	atcatcttctgatcaaatat...55...	aattatttacag	atcctgag
C. Por	ataccgag	gtgggtttttgct...4855...	cagctgcccccttggatcc	CCTGcCAGGGCTGCT	atcatcttctgatcaaatat...55...	aattatttacag	atcctgag
O. Cun	atgccaag	gtgggtttttgct...4855...	cagctgcccccttggatcc	CCTGcCAGGGCTGCT	atcatcttctgatcaaatat...55...	aattatttacag	atcctgag
C. Fam	atactgag	gtgggtgtgtgct...4855...	cagctgcccccttggatcc	CCTGcCAGGGCTGCT	atcatcttctgatcaaatat...55...	aattatttacag	atcctgag
F. Cat	cttctgag	gtgggtgtgtgct...4855...	cagctgcccccttggatcc	CCTGcCAGGGCTGCT	atcatcttctgatcaaatat...55...	aattatttacag	atcctgag
B. Tau	atactgag	gtgggtgtgtgct...4855...	cagctgcccccttggatcc	CCTGcCAGGGCTGCT	atcatcttctgatcaaatat...55...	aattatttacag	atcctgag
E. Cab	atactgag	gtgggttatgct...4855...	cagctgcccccttggatcc	CCTGcCAGGGCTGCT	atcatcttctgatcaaatat...55...	aattatttacag	atcctgag
S. Sus	atactgag	gtgggtttgtgct...4855...	cagctgcccccttggatcc	CCTGcCAGGGCTGCT	atcatcttctgatcaaatat...55...	aattatttacag	atcctgag
O. Avi	atactgag	gtgggtttgtgct...4855...	cagctgcccccttggatcc	CCTGcCAGGGCTGCT	atcatcttctgatcaaatat...55...	aattatttacag	atcctgag
L. Afr	atactgag	gtgggtttgtgct...4855...	cagctgcccccttggatcc	CCTGcCAGGGCTGCT	atcatcttctgatcaaatat...55...	aattatttacag	accctgag
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id=579918 gene=ENSG00000119522 name=DENND1A segment=chr9_126554910_126560539_-1 type=IN

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R. Mac	gtgaccag	gttcggaatgcg...4579...	gcaaaaacggtgccagcaac	AGCGGCCCTGcCAGG	ccaaacccatgtggctcgggt...331...	ttctctccacag	gaagtctt
P. Tro	gtgaccag	gttcggaatgcg...4579...	gcaaaaacggtgccagcaac	AGCGGCCCTGcCAGG	ccaaacccatgtggctcgggt...331...	ttctctccacag	gaagtctt
P. Abe	gtgaccag	gttcggaatgcg...4579...	gcaaaaacggtgccagcaac	AGCGGCCCTGcCAGG	ccaaacccatgtggctcgggt...331...	ttctctccacag	gaagtctt
C. Jac	gtgaccag	gttcggaatgcg...4579...	gcaaaaacggtgccagcaac	AGCGGCCCTGcCAGG	ccaaacccatgtggctcaggt...331...	ttctctccacag	gaagtctt
M. Mus	gtgaccag	gtttggaatgcg...4579...	gcaaaaacagtgccagcaac	AGCGGCCCTGcCAGG	ccaaacccatgtggctcaggt...331...	ttctttccacag	gaagtctt
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O. Cun	gtgaccag	gttcggaatgcg...4579...	gggaaaaacggtgccagcaac	AGCGGCCCTGcCAGG	ccaaacccatgtggctcgggt...331...	ttttctccacag	gaagtctt
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F. Cat	gtgaccag	gttcggaatgcg...4580...	gcaaaaacggtgccagcaac	AGCGGCCCTGcCAGG	ccaaacccatgtggctcgggt...330...	ttctctccacag	gaagtctt
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O. Avi	gtgaccag	gttcggaatgcg...4579...	gcaaaaatggtgccagcaac	AGCGGCCCTGcCAGG	ccaaacccatgtggctcaggt...331...	ttctctccacag	gaagtctt
L. Afr	gtgaccag	gttcggaatgct...4579...	gcaaaaacgatgccagcaac	AGCGGCCCTGcCAGG	ccaaacccatgtggcttgggt...331...	ttctctccacag	gaagtctt
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id=579920 gene=ENSG00000119522 name=DENND1A segment=chr9_126531843_126554865_-1 type=IN VIEW

Figure 626:



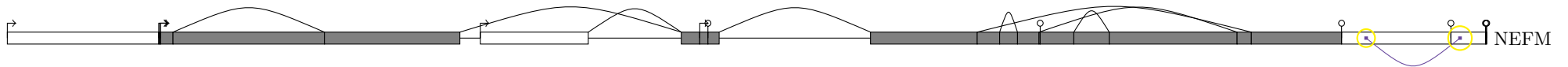
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P.Tro	taaaagat	gtgagttagcag...665...-tactgatttttattcctttct	TTTTaCAG	CTGGAAAa
P.Abe	taaaagat	gtgagttagcag...657...-tactgatttttattcctttct	TTTTaCAG	CTGGAAAa
C.Jac	tgaagac	atgagttagcag...649...-tactgattttcattcctttct	TTTTaCAG	CTGGAAAa
M.Mus	tgaataa	actagttgagag...587...-tactgatttttattcctttct	TTTTaCAG	CTGGAAAa
R.Nor	taaaataa	gctagttgacag...577...-tactgatttttattcctttct	TTTTaCAG	CTGGAAAa
C.Por	taaaagaa	gctcattagcag...638...-tactgatttttattcctttct	TTTTaCAG	CTGGAAAa
O.Cun	tagaagca	gccagttagcag...975...-tactgatttttattcctttct	TTTTaCAG	CTGGAAAa
C.Fam	taaaagaa	gcaatttagcag...633...-tttttttttttattcctttct	TTTTaCAG	CTGGAAAa
B.Tau	taaaaggt	gcaagttagcag...639...-tactgatttttattcctttct	TTTTaCAG	CTGGAAAa
E.Cab	taaaagaa	gcaagttagcct...606...-tactgatttttattcctttct	TTTTaCAG	CTGGAAAa
L.Afr	taaaagaa	gcaagttagcaa...795...-tactgatttgtattcctttct	TTTTaCAG	CTGGAAAa
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id=423179 gene=ENSG00000168958 name=MFF segment=chr2_228193616_228194321.1 type=AN

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R.Mac	tTTTaCAG	CTGGAAAAAcagtgccg--tgttatgtacacctc	caaaaaaagtttagatgt	gtagggga
P.Tro	tTTTaCAG	CTGgAAAAGcagtgccgtggtggttatgtacacctc	caaaaaaagttcaaatgt	gtagggga
P.Abe	tTTTaCAG	CTGgAAAAGcagtgccgtggtggttatgtacacctc	caaaaaaagttcaaatgt	gtagggga
C.Jac	tTTTaCAG	CTGgAAAAGcagtgccg--cgttatgtacacctc	caaaaaaagttcagatgt	gtagggga
M.Mus	tTTTaCAG	CTGGAAAAG-cagtgcccgtggtggttatgtacacctc	caaaaacagttgagctct	gtagggaa
R.Nor	tTTTaCAG	CTGgAAAAGcagtgccgtggtggttatgtacacctc	caaaaacagttgagatct	gtagggaa
C.Por	tTTTaCAG	CTGgAAAAGcagtgccgtggtggttatgtacacctcc	aaaaaagttcagatct	gtagggga
O.Cun	tTTTaCAG	CTGgAAAAGcagtgccgtggtggttatgtacacctcc	aaaaaagttcagatct	gtagggga
C.Fam	tTTTaCAG	CTGgAAAAGcagtgccgtggtggttatgtataacctcc	aaaaaagttcagatgt	gtagggga
B.Tau	tTTTaCAG	CTGgAAAAGcagtgccgtggtggttatgtacacctcc	aaaaaagttcagatct	gtagggga
E.Cab	tTTTaCAG	CTGgAAAAGcagtgccgtggtggttatgtacacctcc	aaaaaagttcagatct	gtagggga
L.Afr	tTTTaCAG	CTGGAAAAG-cagtgccgtggtggttatgtacacctc	caaaaaaagttcagatct	gtagggga
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id=423180 gene=ENSG00000168958 name=MFF segment=chr2_228194322_228194375.1 type=AN VIEW

Figure 627: CS=11.7



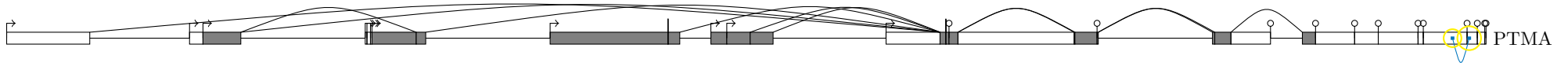
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R. Mac	atttgagt	ccactgcaaaag...32...gattggcagcttcaaaacagAACGGGTTCTCCCATGgGGGc	ccagacattgtatcttact----	247...actggtgcggtt	aaaatgga	
P. Tro	atttgagt	ccattgcaaaag...32...gattggcagcttcaaaacagAACGGGTTCTCCCATGgGGGc	ccagacattgtatcttact----	244...actggtgcattt	aaaatgga	
P. Abe	atttgagt	ccattgcaaaag...35...---tggcagcttcaaaacagaacGGGTTCTCCCATGgGGGc	ccagacattgtatcttact----	244...actggtgcattt	aaaatgga	
C. Jac	atttgagt	ccattgcagaag...32...gattggcagcttcaaaacagAACGGGTTCTCCCATGgGGGc	ccagacattgtatcttact----	247...actggtgcattt	aaaatgga	
M. Mus	atcgagat	ccgttgcaaaag...35...---tgacagcttcaaaacagaatGGGTTCTCCCATGgGGGc	ccagacattgtatcttact----	248...actggtgcattt	aaaatgga	
R. Nor	atcgagat	ccattgcaaaag...35...---tgacagcttcaaaacagaatGGGTTCTCCCATGgGGGc	ccagacattgtatcttact----	245...actggtgcattt	aaaatgga	
C. Por	aatggagt	ccattgcaaaag...36...---tgacagcttcaaaacagaatGGGTTCTCCCATGgGGGc	ccagacattgtatcttact----	247...actggtgcattt	aaaatgga	
O. Cun	atctgagt	ccattgcaaaag...35...---tgacagcttcaaaacagaacGGGTTCTCCCATGgGGGc	ccagacattgtatcttact----	246...actggtgcattt	aaaatgga	
C. Fam	atttgagt	ccattgcaaaag...32...gattgacagcttcaaaacagAACGGGTTCTCCCATGgGGGc	ccagacattgtatcttact----	249...actggtgcattt	aaaaagga	
B. Tau	atttgagt	ccatcgcaaaag...34...gattgacagcttcaaaacagAACGGGTTCTCCCATGgGGGc	ccagacattgtatcttact----	248...actggtgcattt	aaaaagga	
E. Cab	atttgagt	ccattgcaaaag...32...gattgacagcttcaaaacagAACGGGTTCTCCCATGgGGGc	ccagacattgtatcttact----	250...actggtgcattt	aaaatgga	
S. Sus	atttgagt	ccatcgcaaaag...32...gattgacagcttcaaaacagAACGGGTTCTCCCATGgGGGc	ccagacattgtatcttact----	246...actggtgcattt	aaaaagga	
L. Afr	atctgaga	tcattgcaaaag...32...gattgacagcttcaaaacagAACGGGTTCTCCCATGgGGGc	TCCA	gacattgtatcttactttgt...	243...actggtgcattt	caaatgga
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id=725165 gene=ENSG00000104722 name=NEFM segment=chr8_24776129_24776489_1 type=E3

H. Sap	gtgcattt	aaaatggacttttGTTTCATGGGAGAACCTCGTT	gacatgcacagtttgcaatc...	49...catattggaac	atagtcaa
R. Mac	gtgcgctt	aaaatggacttttGTTTCATGGGAGAACCTCGTT	gacatgcacagtttgcaatc...	49...catattggaac	atagtcaa
P. Tro	gtgcattt	aaaatggacttttGTTTCATGGGAGAACCTCGTT	gacatgcacagtttgcaatc...	49...catattggaac	atagtcaa
P. Abe	gtgcattt	aaaatggacttttGTTTCATGGGAGAACCT	tgctgacatgcacagtttgcaatc...	53...catattggaac	atagtcaa
C. Jac	gtgcattt	aaaatggacttttGTTTCATGGGAGAACCTCGTT	gacatgcacagtttgcaatc...	49...catattggaac	atagtcaa
M. Mus	gtgcattt	aaaatggacttttGTTTCATGGGAGAACCT	tgctgatctgcacagtttgcaatc...	53...catactggaac	ataagcca
R. Nor	gtgcattt	aaaatggacttttGTTTCATGGGAGAACCT	tgctgacctgcacagtttgcaatc...	53...catactggaac	ataaacca
C. Por	gtgcatct	aaaatggacttttGTTTCATGGGAGAACCT	cgctgacatgcacagtttgcaatc...	53...catattggaac	atagtcaa
O. Cun	gtgcattt	aaaatggacttttGTTTCATGGGAGAACCT	cgctgacatgcacagtttgcaatc...	53...catattggaac	atagtcaa
C. Fam	gtgcattt	aaaaaggacttttGTTTCATGGGAGAACCTCGTT	gacatgcacagtttgcaatc...	49...catattggaac	atagtcaa
B. Tau	gtgcattt	aaaaaggacttttGTTTCATGGGAGAACCTCGTT	gacatgcacagtttgcaatc...	49...catattggaac	atagtcaa
E. Cab	gtgcattt	aaaatggacttttGTTTCATGGGAGAACCTCGTT	gacatgcacagtttgcaatc...	49...catattggaac	atagtcaa
S. Sus	gtgcattt	aaaaaggacttttGTTTCATGGGAGAACCTCGTT	gacatgcacagtttgcaatc...	50...catattggaac	atagtcaa
L. Afr	gtgcattt	caaaTGGActTTCGttCATGGGAGAACCTCGTT	gacatgcacagtttgcaatc...	49...catattggaac	ataatcaa
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id=725166 gene=ENSG00000104722 name=NEFM segment=chr8_24776490_24776603_1 type=E3 VIEW

Figure 628:



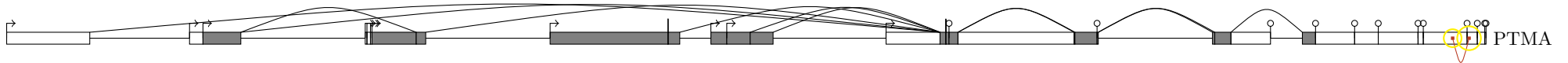
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R.Mac	gtaaaaa	agcaaaaacgac...69...tagttggtttgatgagatg	GTTAAAaAGGCCAAAGA	-taaaaggtttc-tttttt--tttcctttttt-gtctatgaagttgct-----	gttta-ttttttttgg	cctgtttg
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M.Mus	taaaaaa	agcaaaaacaac...67...tagttggtttgatgagatg	GTTAAAaAGGCCAAAGA	-taaaagatttttttttcttttctttct-gtctatgaagttgct-----	gtttatttttttgg	cctgtttg
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P.Tro	tTTTTGG	CCTgTTTGAT	gtatgtgtgaacaatggtgtccaacaataa	acaggaat
C.Jac	tTTTTGG	CCTgTTTGAT	gtatgtgtgaacaatggtgtccaacaataa	acaggaat
M.Mus	tTTTTGG	CCTgTTTGAT	gtatgtgtgaacaa---tgtccaacaataa	accggaat
R.Nor	tTTTTGG	CCTgTTTGAT	gtatgtgtgaacaa---tgtccaacaataa	accggaat
C.Por	tTTTTGG	CCTgTTTGAT	gtatgtgtgaacaatggtgtccaacaataa	accggaat
O.Cun	tTTTTGG	CCTgTTTGAT	gtatgtgtgaacaatggtgtccaacaataa	accggaat
C.Fam	tTTTTGG	CCTgTTTGAT	gtatgtgtgaacaatggtgtccaacaataa	accggaat
F.Cat	tTTTTGG	CCTgTTTGAT	gtatgtgtgaacaatggtgtccaacaataa	accggaat
B.Tau	tTTTTGG	CCTgTTTGAT	gtatgtgtgaacaatggtgtccaacaataa	accggaat
E.Cab	tTTTTGG	CCTgTTTGAT	gtatgtgtgaacaatggtgtccaacaataa	accggaat
S.Sus	tTTTTGG	CCTgTTTGAT	gtatgtgtgaacaatgctgtccaaaataa	actggaat
L.Afr	tTTTTGG	CCTgTTTGAT	gtatgtgtgaacaatggtgtccaacaataa	accggaat
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Figure 629:



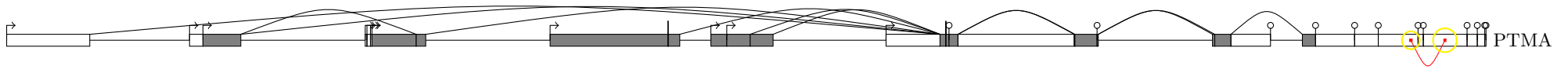
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L. Afr	gtaaaaaa	agcaaaaacaac...65...gttggtttgatgatgagatggt	TAAAaAGGCCAAAGATAAAA	--ggttg-c-tttttttcctttttt	---gtctatgaagttgct	-----gtttattttttttgg	cctgtttg
	*****	* * * * *	*****	* * * * *	*****	** * *****	*****

id=110987 gene=ENSG00000187514 name=PTMA segment=chr2_232578000_232578175.1 type=EN

H. Sap	gtaaaaaa	agcaaaaatgac...130...--ttttgtctatgaagttgctg	TTTAT-TTTTTTTGG	CCTgTTTg
R. Mac	gtaaaaaa	agcaaaaacgac...129...--ttttgtctatgaagttgctg	TTTAT-TTTTTTTGG	CCTgTTTg
P. Tro	gtaaaaaa	agcaaaaatgac...129...--ttttgtctatgaagttgctg	TTTAT-TTTTTTTGG	CCTgTTTg
C. Jac	gtaaaaaa	agcgaaaacgac...129...--ttttgtctatgaagttgctg	TTTAT-TTTTTTTGG	CCTgTTTg
M. Mus	taaaaaaa	agcaaaaacaac...129...--tttctgtctatgaagttgct	GTTTATTTTTTTTTGG	CCTgTTTg
R. Nor	gtaaaaaa	aacaaaaacaac...132...--ttttgtctatgaagttgctg	TTTAT-TTTTTTTGG	CCTgTTTg
C. Por	gtaaaaaa	agcaaaaaccac...127...--ttttgtctatgaagttgctg	TTTAT-TTTTTTTGG	CCTgTTTg
O. Cun	gtaaaaaa	agcaaaaacgac...130...--ttttgtctatgaagttgctg	TTTAT-TTTTTTTGG	CCTgTTTg
C. Fam	gtaaaaaa	agcaaaaacaac...129...--ttttgtctatgaagttgctg	TTTAT-TTTTTTTGG	CCTgTTTg
F. Cat	gtaaaaaa	agcaaaaacaac...130...--ttttgtctatgaagttgctg	TTTAT-TTTTTTTGG	CCTgTTTg
B. Tau	gtaaaaaa	agcaaaaacaac...133...--ttttgtctatgaagttgctg	TTTAT-TTTTTTTGG	CCTgTTTg
E. Cab	gtaaaaaa	agcaaaaacaac...128...--ttttgtctatgaagttgctg	TTTAT-TTTTTTTGG	CCTgTTTg
S. Sus	gtaaaaaa	agcaaaaagaac...146...tgctgggtttttcgtgtgc	T-----GTTTTTTGG	CCTgTTTg
L. Afr	gtaaaaaa	agcaaaaacaac...127...--gtctatgaagttgctgttta	TT-----TTTTTTTTGG	CCTgTTTg
	*****	* * * * *	** * * * *	*****

id=110987 gene=ENSG00000187514 name=PTMA segment=chr2_232578000_232578175.1 type=EN VIEW

Figure 630:



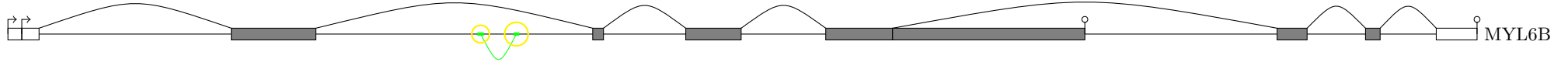
H.Sap	-aaaaggaa	at ttgtttgtat...82...--gagcgttctctgtcctactt	CTGACTtt	ACTTGTGGTGTG	accatgttcattataatctcaaagga	gaaaaaaaa
R.Mac	-aaaaggaa	at ttgtttgtat...82...--gagcgttctctgtcctactt	CTGACTtt	ACTTGTGGTGTG	accatgttcattataatctcaaagga	gaaaaaaaa
P.Tro	-aaaaggaa	at ttgtttgtat...82...--gagcgttctctgtcctactt	CTGACTtt	ACTTGTGGTGTG	accatgttcattataatctcaaagga	gaaaaaaaa
C.Jac	-aaaaggaa	at ttgtttgtat...82...--gagcgttctctgtcctactt	CCGACTtt	ACTTGTGGTGTG	accatgttcattataatctcaaagga	gaaaaaaaa
M.Mus	-aaaggaaa	at ttgtttgtat...85...----gcgtttctctgtcctacttca	GACTtt	ACTTGTGGTGTG	accatgttcattataatctcaaagga	gaaaaaaaa
R.Nor	-aaaggaaa	at ttgtttgtat...85...----gcgtttctctgtcctacttca	GACTtt	ACTTGTGGTGTG	accatgttcattataatctcaaagga	gaaaaaaaa
C.Por	aaaaggaaa	at ttgtttgta-...84...--gagccttctctgtcctactt	CCGACTtt	ACTTGTGGTGTG	accatgttcattataatctcaaagga	gaaagaaa
O.Cun	aaaaggaaa	at ttgtttgta-...83...--gagcgtcctctgtcctactt	CTGACTtt	ACTTGTGGTGTG	accatgttcattataatctcaaagga	gaaaaaaaa
C.Fam	-aaaggaaa	at ttgtttgtat...83...--gagcgttctctgtcctactt	CTGACTtt	ACTTGTGGTGTG	accatgttcattataatctcaaagga	gaaaaaaaa
F.Cat	aaaaggaaa	at ttgtttgta-...84...--gagcgttctctgtcctactt	CTGACTtt	ACTTGTGGTGTG	accatgttcattataatctcaaagga	gaaaaaaaa
B.Tau	-aaaggaaa	at ttgtttgtat...82...--ggagcgttctctgtcctactt	CTGACTtt	ACTTGTGGTGTG	accatgttcattataatctcaaagga	gaaaaaaaa
E.Cab	aaaaggaaa	at ttgtttgta-...84...--gagcgtcctctgtcctactt	CTGACTtt	ACTTGTGGTGTG	accatgttcattataatctcaaagga	gaaaaaaaa
L.Afr	-aaaggaga	at ttgtttgtat...80...tcagagcgtcctctgtc--c	TTGACTtt	ACTTGTGGTGTG	accatgttcattataatctcaaagga	gaaaaaaaa
	*** * *	*****	** * *****	** * *****	** * *****	*** **

id=110985 gene=ENSG0000187514 name=PTMA segment=chr2_232577819_232577978.1 type=EN

H.Sap	gtaaaaa	agcaaaaatgac...38...ttttgtgtatgtacttagc	TGTACTATAAGTAGTTGG	tttgtatgagatggtaaaa...56...tatttttttgg	cctgtttg
R.Mac	gtaaaaa	agcaaaaacgac...38...ttttgtgtatgtacttagc	TGTACTATAAGTAGTTGG	tttgtatgagatggtaaaa...55...tatttttttgg	cctgtttg
P.Tro	gtaaaaa	agcaaaaatgac...38...ttttgtgtatgtacttagc	TGTACTATAAGTAGTTGG	tttgtatgagatggtaaaa...55...tatttttttgg	cctgtttg
C.Jac	gtaaaaa	agcgaaaacgac...38...ttgtgtgtatgtacttagc	TGTACTATAAGTAGTTGG	tttgtatgagatggtaaaa...55...tatttttttgg	cctgtttg
M.Mus	taaaaaa	agcaaaaacaac...36...ctttgtgtatgtacttagc	TGTACTATAAGTAGTTGG	tttgtatgagatggtaaa--...61...tatttttttgg	cctgtttg
R.Nor	gtaaaaa	aacaaaaacaac...40...ttttgtgtatgtacttagc	TGTACTATAAGTAGTTGG	tttgtatgagatggtaaa--...57...tatttttttgg	cctgtttg
C.Por	gtaaaaa	agcaaaaaccac...36...ttttgtgtatgtacttagc	TGTACTATAAGTAGTTGG	tttgtatgagatggtaaaa...54...tatttttttgg	cctgtttg
O.Cun	gtaaaaa	agcaaaaacgac...39...ttttgtgtatgtacttagc	TGTACTATAAGTAGTTGG	tttgtatgagatggtaaaa...55...tatttttttgg	cctgtttg
F.Cat	gtaaaaa	agcaaaaacaac...39...ttttgtgtatgtacttagc	TGTACTATAAGTAGTTGG	tttgtatgagatggtaaaa...54...tatttttttgg	cctgtttg
F.Cat	gtaaaaa	agcaaaaacaac...39...ttttgtgtatgtacttagc	TGTACTATAAGTAGTTGG	tttgtatgagatggtaaaa...55...tatttttttgg	cctgtttg
B.Tau	gtaaaaa	agcaaaaacaac...41...ttttgtgtatgtacttagc	TGTACTATAAGTAGTTGG	tttgtatgagatggtaaaa...55...tatttttttgg	cctgtttg
E.Cab	gtaaaaa	agcaaaaacaac...38...ttttgtgtatgtacttagc	TGTACTATAAGTAGTTGG	tttgtatgagatggtaaaa...54...tatttttttgg	cctgtttg
L.Afr	gtaaaaa	agcaaaaacaac...32...ctttgtgtatgtacttagc	TGTACTATAAGTAGTTGG	tttgtatgagatggtaaaa...56...tatttttttgg	cctgtttg
	*****	* * **** **	* *****	* *****	*****

id=110987 gene=ENSG0000187514 name=PTMA segment=chr2_232578000_232578175.1 type=EN VIEW

Figure 631:



H. Sap	aagtgggtg	gtgagtctctgg	..378..	-----gacttgttagacaatcacag	CTGGGGGC	caGGGGT	AATTT	-----	-agcctttgttcagccccag	...257...	tttctccacag	atcgagtt
R. Mac	aagtgggtg	gtgagtctctgg	..370..	aggacagacttgttagacaa	TCACAGCTGGGGGC			-----	caggggtaaatttagccttt	...270...	tttctccacag	atcgagtt
P. Tro	aagtgggtg	gtgagtctctgg	..372..	aggacagacttgttagacaa	TCACAGCTGGGGGC			-----	caggggtaaatttagccttt	...270...	tttctccacag	atcgagtt
P. Abe	aagtgggtg	gtgagtctctgg	..372..	aggacagacttgttagacaa	TCACAGCTGGGGGC			-----	caggggtaaatttagccttt	...270...	tttctccacag	atcgagtt
C. Jac	aagtgggtg	gtgagtcctctgg	..366..	aggacagacttgttagacaa	TCACAGCTGGGGGC			-----	caggggtaaatttagccttt	...272...	tttctccacag	atcgagtt
M. Mus	aagtgggtg	gtgagtcctctgg	..218..	aggcaggcttgttagacaa	TCACAGCTGGGGGC	agGGGTAAAtTTAGcc	TTTGTTCaGCCCCCAGT	taTGTGA	gggatgcaggactcgggta	...223...	tgcccctacag	atcgagtt
R. Nor	aagtgggtg	gtgagtcctctgg	..198..	aggacagacttgttagacaa	TCACAGCTGGGGGC	agGGGTAAAtTTAGcc	TTTGTTCaGCCCCCAGT	taTGTGA	gggatgcaggactcgggtag	...221...	tgcccctacag	atcgagtt
C. Por	aagtgggtg	gtaagctctctgg	..345..	aggacagacttgttagacaa	TCACAGCTGGGGGC			-----	caggagtaaatttagccttt	...276..	tttctccacag	atcgagtt
O. Cun	aagtgggtg	gtgagtcctctgg	..346..	aggcagacttgttagacaa	TCACAGCTGGGGGC			-----	caggggtaaatttagccttt	...223...	tctctccacag	atcgagtt
C. Fam	aagtgggtg	gtgagtcctctgg	..368..	aggacagacttgttagacaa	TCACAGCTGGGGGC			-----	caggggtaaatttagccttt	...272...	tttctccacag	atcgagtt
F. Cat	aagtgggtg	gtgagttccagg	..391..	aggacagacttgttagacaa	TCACAGCTGGGGGC			-----	caggggtaaatttagccttt	...271...	tttctccacag	atcgagtt
B. Tau	aagtgggtg	gtaagtcctga	..364..	aggacagacttgttagacaa	TCACAGCTGGGGGC			-----	caggggtaaatttagccttt	...272...	tctctccacag	atcgagtt
E. Cab	aagtgggtg	gtgagtcctctgg	..388..	aggacagatttgttagacaa	TCACAGCTGGGGGC			-----	caggggtaaatttagccttt	...267...	tttctccacag	atcgagtt
S. Sus	aagtgggtg	gtgagtcctctgg	..377..	aggacagacttgttagacaa	TCACAGCTGGGGGC			-----	caggggtaaatttagccttt	...272...	tttctccacag	atcgagtt
O. Avi	aagtgggtg	gtaagtcctgaa	..370..	aggacagacttgttagacaa	TCACAGCTGGGGGC			-----	caggggtaaatttagccttt	...272...	tctctccacag	atcgagtt
L. Afr	aagtgggtg	gtgagtaccag	..390..	aggacagacttgttagacaa	TCACAGCTGGGGGC			-----	caggggtaaatttagccttt	...272...	tttctccacag	atcgagtt
	*****	** **			*	*****					*	*****

id=123195 gene=ENSG0000196465 name=MYL6B segment=chr12.56547877_56548596.1 type=IN

H. Sap	aagtgggtg	gtgagtctctgg	..473..	ggaggaaacag	--gtggcatg	-----	GGATTaACCCTGTCCCG	-----	-gaaacctccccactgtaat	..164..	tttctccacag	atcgagtt	
R. Mac	aagtgggtg	gtgagtctctgg	..409..	gtaaatttagcctttgttca	-----	-----	GCCCCCAGT	taTGTGA	gggatgcagggtcagggca	...229...	tttctccacag	atcgagtt	
P. Tro	aagtgggtg	gtgagtctctgg	..411..	gtaaatttagcctttgttca	-----	-----	GCCCCCAGT	taTGTGA	gggatgcagggtcagggca	...229...	tttctccacag	atcgagtt	
P. Abe	aagtgggtg	gtgagtctctgg	..411..	gtaaatttagcctttgttca	-----	-----	GCCCCCAGT	taTGTGA	gggatgcagggtcagggca	...229...	tttctccacag	atcgagtt	
C. Jac	aagtgggtg	gtgagtcctctgg	..405..	gtaaatttagcctttgttca	-----	-----	GCCCCCAGT	taTGTGA	gggatgcagggtcagggca	...231...	tttctccacag	atcgagtt	
M. Mus	aagtgggtg	gtgagtcctctgg	..218..	aggcaggctt	--ttagacaa	TCACAGCTGGGGGC	agGGGTAAAtTTAGcc	TTTGTTCaGCCCCCAGT	taTGTGA	gggatgcaggactcgggta	...223...	tgcccctacag	atcgagtt
R. Nor	aagtgggtg	gtgagtcctctgg	..198..	aggacagactt	--ttagacaa	TCACAGCTGGGGGC	agGGGTAAAtTTAGcc	TTTGTTCaGCCCCCAGT	taTGTGA	gggatgcaggactcgggtag	...221...	tgcccctacag	atcgagtt
C. Por	aagtgggtg	gtaagctctctgg	..384..	gtaaatttagcctttgttca	-----	-----	GCCCCCAGT	taTGTGA	gggatgcagggtcagggca	...235...	tttctccacag	atcgagtt	
O. Cun	aagtgggtg	gtgagtcctctgg	..385..	gtaaatttagcctttgttca	-----	-----	GCCCCCAGT	taTGTGA	gggatgcagggtcagggca	...182...	tctctccacag	atcgagtt	
C. Fam	aagtgggtg	gtgagtcctctgg	..407..	gtaaatttagcctttgttca	-----	-----	GCCCCCAGT	taTGTGA	gggatgcagggtcagggca	...231...	tttctccacag	atcgagtt	
F. Cat	aagtgggtg	gtgagttccagg	..430..	gtaaatttagcctttgttca	-----	-----	GCCCCCAGT	taTGTGA	gggatgcagggtcagggca	...230...	tttctccacag	atcgagtt	
B. Tau	aagtgggtg	gtaagtcctga	..403..	gtaaatttagcctttgttca	-----	-----	GCCCCCAGT	taTGTGA	gggatgcagggtcagggca	...231...	tctctccacag	atcgagtt	
E. Cab	aagtgggtg	gtgagtcctctgg	..427..	gtaaatttagcctttgttca	-----	-----	GCCCCCAGT	taTGTGA	gggatgcaggactcagggca	...226...	tttctccacag	atcgagtt	
S. Sus	aagtgggtg	gtgagtcctctgg	..416..	gtaaatttagcctttgttca	-----	-----	GCCCCCAGT	taTGTGA	gggatgcagggtcagggca	...231...	tttctccacag	atcgagtt	
O. Avi	aagtgggtg	gtaagtcctgaa	..409..	gtaaatttagcctttgttca	-----	-----	GCCCCCAGT	taTGTGA	gggatgcagggtcagggca	...231...	tctctccacag	atcgagtt	
L. Afr	aagtgggtg	gtgagtaccag	..429..	gtaaatttagcctttgttca	-----	-----	GCCCCCAGT	taTGTGA	aggatgcagggtcagggca	...231...	tttctccacag	atcgagtt	
	*****	** **			*		*	*****	** *	*	*	*****	

id=123195 gene=ENSG0000196465 name=MYL6B segment=chr12.56547877_56548596.1 type=IN VIEW

Figure 632:



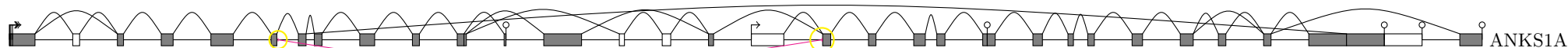
H.Sap	ttgttttag	cttatccaacaaaagtattaacatatacattaacaacgctgaaagtagccta	CTTTaaGAGAAAATATGC	agaagaagaagatttacatcaagattaccatgggtat	ttttccaaaa	gtaagggt
R.Mac	ttgttttag	cttatccaaaaaagtattaacatatacattaacaacgctgaaagtagccta	CTTTaaGAGAAAATATGC	agaagaagaagatttacatcaagattaccatgggtat	ttttccaaaa	gtaagggt
P.Tro	ttgttttag	cttatccaacaaaagtattaacatatacattaacaacgctgaaagtagccta	CTTTaaGAGAAAATATGC	agaagaagaagatttacatcaagattaccatgggtat	ttttccaaaa	gtaagggt
P.Abe	ttgttttag	cttatccaacaaaagtattaacatatacattaacaacgctgaaagtagccta	CTTTaaGAGAAAATATGC	agaagaagaagatttacatcaagattaccatgggtat	ttttccaaaa	gtaagggt
C.Jac	ttgttttag	cttatccaacaaaagtattaacataaacattaacaacgctgaaagtagccta	CTTTaaGAGAAAATATGC	agaagaagaagatttacatcaagattaccatgggtat	ttttccaaaa	gtaagggt
M.Mus	tgtttttag	cttatccaagagagtcctatcatattcatcaacaacgctgaaagtagccta	CTTTaaGAGAAAATATGC	agaagaagaagatttacatcaagattaccatgggtat	ttttccaaaa	gtaagggt
R.Nor	tgtttttag	cttatccaagaggagtactatcatattcattaacaacgctgaaagtagccta	CTTTaaGAGAAAATATGC	agaagaagaagatttacatcaagattaccatgggtat	ttttccaaaa	gtaagggt
C.Por	ttatttttag	cttatccaacaaaagtattaacatatacattaacaacgctgaaagtagccta	CTTTaaGAGAAAATATGC	agaagaagaagatttacatcaagattaccatgggtat	ttttccaaaa	gtaagggt
C.Fam	ttgttttag	cttatccaacaaaagtattaacatatacattaacaacgctgaaagtagccta	CTTTaaGAGAAAATATGC	agaagaagaagatttacatcaagattaccatgggtat	ttttccaaaa	gtaagggt
B.Tau	ttgttttag	cttatccaacaaaagtattaacatatacattaacaacgctgaaagtagccta	CTTTaaGAGAAAATATGC	agaagaagaagatttacatcaagattaccatgggtat	ttttccaaaa	gtaagggt
E.Cab	ttgttttag	cttatccaacaaaagtattaacatatacattaacaacgctgaaagtagccta	CTTTaaGAGAAAATATGC	agaagaagaagatttacatcaagattaccatgggtat	ttttccaaaa	gtaagggt
S.Sus	ttgttttag	cttatccaacaaaagtattaacatacacattaacaacgctgaaagtagccta	CTTTaaGAGAAAATATGC	agaagaagaagatttacatcaagattaccatgggtat	ttttccaaaa	gtaagggt
O.Avi	ttgttttag	cttatccaacaaaagtattaacatatacgttaacaacgctgaaagtagccta	CTTTaaGAGAAAATATGC	agaagaagaagatttacatcaagattaccatgggtat	ttttccaaaa	gtaagggt
L.Afr	ttgttttag	attattcaacaaaagtattaccatacacattaacaacgctgaaagtagccta	CTTTaaGAGAAAATATGC	agaagaagaagatttacataaaaattaccatgggtat	ttttccaaaa	gtaagggt
	* ****	**** ** *	** ** *	**** ** *	***** ** *	****

id=539591 gene=ENSG00000186369 name=AL390816.1 segment=chr14.62594515.62594630.1 type=E5

H.Sap	ttgttttag	cttatccaacaa...71...ttacatcaagattaccatgg	GTATTTTCcaAAA	Gtaagggt
R.Mac	ttgttttag	cttatccaaaa...71...ttacatcaagattaccatgg	GTATTTTCcaAAA	Gtaagggt
P.Tro	ttgttttag	cttatccaacaa...71...ttacatcaagattaccatgg	GTATTTTCcaAAA	Gtaagggt
P.Abe	ttgttttag	cttatccaacaa...71...ttacatcaagattaccatgg	GTATTTTCcaAAA	Gtaagggt
C.Jac	ttgttttag	cttatccaacaa...71...ttacatcaagattaccatgg	GTATTTTCcaAAA	Gtaagggt
M.Mus	tgtttttag	cttatccaagag...71...ctacatcaagattccatgg	GTATTTTCcaAAA	Gtaagggt
R.Nor	tgtttttag	cttatccaagag...71...ttacatcaagattaccaggg	GTATTTTCcaAAA	Gtaagggt
C.Por	ttatttttag	cttatccaacaa...71...ttacatcaggattaccatgg	GTATTTTCcaAAA	Gtaagggt
C.Fam	ttgttttag	cttatccaacaa...71...ttacatcaagattaccatgg	GTATTTTCcaAAA	Gtaagggt
B.Tau	ttgttttag	cttatccaacaa...71...ttacatcaagattaccatgg	GTATTTTCcaAAA	Gtaagggt
E.Cab	ttgttttag	cttatccaacaa...71...ttacatcaagattaccatgg	GTATTTTCcaAAA	Gtaagggt
S.Sus	ttgttttag	cttatccaacaa...71...ttacatcaagattaccatgg	GTATTTTCcaAAA	Gtaagggt
O.Avi	ttgttttag	cttatccaacaa...71...ttacatcaagattaccatgg	GTATTTTCcaAAA	Gtaagggt
L.Afr	ttgttttag	attattcaacaa...71...ttacataaaaattaccaggg	GTATTTTCcaAAA	Gtaagggt
	* ****	**** ** *	**** * ** ** *	****

id=539591 gene=ENSG00000186369 name=AL390816.1 segment=chr14.62594515.62594630.1 type=E5 VIEW

Figure 633:



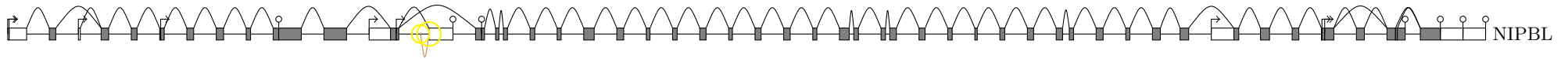
H.Sap	ggctgcaG	GTGAGAGGTCGGCAGCGCT	cttgctctacacagcgtgcc	---..234...	-gtgcctttctag	gaactgac
R.Mac	ggccgcaG	GTGAGAGGTCGGCAGCGCT	cttgctctacacagcatgcc	---..233...	-gtgcctttctag	gaactgat
P.Tro	ggctgcaG	GTGAGAGGTCGGCAGCGCT	cttgctctacacagcatgcc	---..234...	-gtgcctttctag	gaattgac
P.Abe	ggctgcaG	GTGAGAGGTCGGCAGCGCT	cttgctctacacagcatgcc	---..234...	-gtgcctttctag	gaattgac
C.Jac	ggctgcaG	GTGAGAGGTCGGCAGCGCT	cttgctctacaca--taccagg	..231...	-gtgcctttctag	gaattgac
C.Por	ggccgcaG	GTGAGAGGTCGGCAGTGCT	ctcgtct-cacagcatgccg	---..219...	-gcgctttctag	gaatcgac
O.Cun	ggctgcaG	GTGAGAGGTCGGCAGCGCT	cttgctctacacagcatgcc	---..237...	-gtgcctttctag	gaattgat
C.Fam	ggctgcaG	GTGAGAGGTCGGCAGCGCT	ctcgtctacacagcatgcc	---..238...	-gtgcctttctag	gaatcgat
F.Cat	ggctgcaG	GTGAGAGGTCGGCAGCGCT	cttgctctacacagcatgcc	---..236...	-tatg-ctttctag	gaattgat
B.Tau	ggctgcaG	GTGAGAGGTCGGCAGTGCT	cttgctctgtacagcatgcc	---..223...	-gtgcctttctag	gaattgat
E.Cab	ggctgcaG	GTGAGAGGTCGGCAGCGCT	cttgctt-cacgcagcatgcc	---..220...	-tgtg-ctttctag	gaattgat
S.Sus	ggctgcaG	GTGAGAGGTCGGCAGCGCT	cttgctctacacagcatgcc	---..236...	-gtgcctttctag	gaattgac
O.Avi	ggctgcaG	GTGAGAGGTCGGCAGCGCT	cttgctctacacagcatgnnn	---..222...	-gtgcctttctag	gaattgat
L.Afr	ggctgcaG	GTGAGAGGTCGGCAGCGCT	cttgctctacacagcatgcc	---..239...	-gtgcctttctag	gaattgat
	*** **	*****	* * * * *		* **** **	*** **

id=723526 gene=ENSG0000064999 name=ANKS1A segment=chr6_34950605_34950889_1 type=IN

H.Sap	cactggag	gtgatgtgttta..1410..	-taatggttttcccttttca	AGCGt	CTGCCGAtt	CCTCTct	CATCag	gtttacgg
R.Mac	cactggag	gtgatgtgttta..1409..	-taatggttttcccttttca	AGCGt	CTGCCGAtt	CCTCTct	CGTCag	gttcgcgg
P.Tro	cactggag	gtgatgtgttta..1409..	-taacggttttcccttttca	AGCGt	CTGCCGAtt	CCTCTct	CGTCag	gttcgcgg
P.Abe	cactggag	gtgatgtgttta..1409..	-taatggttttcccttttca	AGCGt	CTGCCGAtt	CCTCTct	CGTCag	gttcgcgg
C.Jac	cactggag	gtgatgtgttta..1412..	-taatggttttcccttttca	AGCGt	CTGCCGAtt	CCTCTct	CGTCag	gttcgcgg
C.Por	cgaggaa	gtgacatgacgt..1118..	-taatggttttccctgttca	AGCGt	CTGCCGAtt	CCTCTct	CGTCag	gttcgcgg
O.Cun	cactggag	gtgatgttttg..1358..	-taatggttttcccttttca	AGCGt	CTGCCGAtt	CCTCTct	CGTCag	gttcgcga
C.Fam	ctctggag	gtgatgttttca..1294..	-taatggttttcccttttca	AGCGt	CTGCCGAtt	CCTCTct	CGTCag	gttcgcgg
F.Cat	ctctggag	gtgatgtccttg..1270..	-taatgggttttcccttttca	AGCGt	CTGCCGAtt	CCTCTct	CGTCag	gttcgcgg
B.Tau	ctccggag	gtgatgttttg..1119..	-caatggttttcccttttca	AGCGt	CTGCCGAtt	CCTCTct	CGTCag	gtgcgcgg
E.Cab	ctctggag	gtgatgttttg..1377..	-taatggttttcccttttca	AGCGt	CTGCCGAtt	CCTCTct	CGTCag	gttcgcgg
S.Sus	ctctggag	gtgatgttttg..1255..	-taatggttttcccttttca	AGCGt	CTGCCGAtt	CCTCTct	CGTCag	gttcgcgg
O.Avi	ctccggag	gtgacgttttg..1119..	-tcgatggttttcccttttca	AAGCGt	CTGCCGAtt	CCTCTct	CGTCag	gtgcgcgg
L.Afr	cactggag	gtgatgttttg..1445..	-taatggttttcccttttca	AGCGt	CTGCCGAtt	CCTCTct	CGTCag	gttcgcgg
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id=723549 gene=ENSG0000064999 name=ANKS1A segment=chr6_35026455_35027923_1 type=IN VIEW

Figure 634: CS=13.44



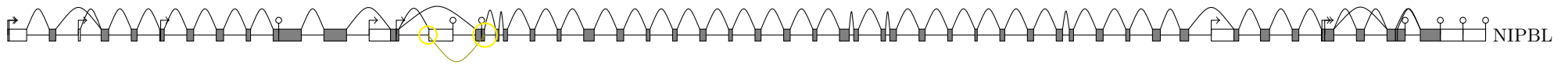
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R. Mac	ttttgaat	gtaagatcacaca...433...--agagtgggggctcagggaaat	GCTT	ac	TGGAAGAGGTGA	cacttgagttgagcttgaa-----	...151...actgtttccag	agctggct
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C. Jac	ttttgaat	gtaagatcacaca...418...--agagtgggggctcagggaaat	GCTT	ac	TGGAAGAGGTGA	cacttgagttgagcttgaa-----	...151...actgtttccag	agctggct
M. Mus	gtttgaat	gtaagatcatt...383...--tcagtgggggttcagagagt	GCTT	ac	TGGAAGAGGTGA	cact-----tgagtctggaaggaca...145...actgtttccag	agctggct	
R. Nor	ttttgaat	gtaagatcatt...371...catcagtgggggttc--agagt	GCTT	ac	TGGAAGAGGTGA	cact-----tgagtctggaaggaca...145...actgtttccag	agctggct	
C. Por	ttttgaat	gtaagattata...388...taagagtgggggttc--agaat	GCTT	ac	TGGAAGAGGTGA	cacttgagttgagcttgaa-----	...151...actgtttccag	agctggct
O. Cun	ttttgaat	gtaagatcatt...405...--agaatgggggttcaggaat	GCTT	ac	TGGAAGAGGTGA	cacttgagttgagcttgaa-----	...151...actgtttccag	agctggct
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F. Cat	ttttgaat	gtaagatcacaca...424...--atactgggggttcaggaac	GCTT	ac	TGGAAGAGGTGA	cacttgagttgagcttgaa-----	...151...actgtttccag	agctggct
B. Tau	ttttgaat	gtaagatcacaca...426...-tatact-ggggttcagagagc	GCTT	ac	TGGAAGAGGTGA	cactagagttgagcttgaa-----	...151...actgtttccag	agctggct
E. Cab	ttttgaat	gtaagatcacaca...422...--atactgggggttcaggaac	GCTT	ac	TGGAAGAGGTGA	cacttgagttgagcttgaa-----	...151...actgtttccag	agctggct
S. Sus	ttttgaat	gtaagatcacaca...420...--atactggggattcaagaac	GCTT	ac	TGGAAGAGGTGA	cact-----tgagtctggaaggaca...147...actgtttccag	agctggct	
O. Avi	ttttgaat	gtaagatcaaaa...427...--nnnnnnnnnnnnnagcgc	GCTT	ac	TGGAAGAGGTGA	cact-----agagtctggaaggaca...146...actgtttccag	agctggct	
L. Afr	ttttgaat	gtaagatcgtga...410...atatact-ggggttcaggaac	GGCTT	ac	TGGAAGAGGTGA	cacttgagttgagctttaa-----	...150...actgtttccag	agctggct
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P. Tro	ttttgaat	gtaagatcacaca...621...cctggaattcctcccttggt	TCACTg	TTTTCCAG	AGCTggct
P. Abe	ttttgaat	gtaagatcacaca...617...cctggaattcctcccttggt	TCACTg	TTTTCCAG	AGCTggct
C. Jac	ttttgaat	gtaagatcacaca...605...cctggaattcctcccttggt	TCACTg	TTTTCCAG	AGCTggct
M. Mus	gtttgaat	gtaagatcatt...564...cctggaattcctcccttggt	TCACTg	TTTTCCAG	AGCTggct
R. Nor	ttttgaat	gtaagatcatt...552...cctggacttcctcccttggt	TCACTg	TTTTCCAG	AGCTggct
C. Por	ttttgaat	gtaagattata...575...cctggaattcctcccttggt	TCACTg	TTTTCCAG	AGCTggct
O. Cun	ttttgaat	gtaagatcatt...592...cctggaattcctcccttggt	TCACTg	TTTTCCAG	AGCTggct
C. Fam	ttttgaat	gtaagtaccaca...599...cctggaattcctcccttggt	TCACTg	TTTTCCAG	AGCTggct
F. Cat	ttttgaat	gtaagatcacaca...611...cctggaattcctcccttggt	TCACTg	TTTTCCAG	AGCTggct
B. Tau	ttttgaat	gtaagatcacaca...613...cctggaattcctcccttggt	TCACTg	TTTTCCAG	AGCTggct
E. Cab	ttttgaat	gtaagatcacaca...609...cctggaattcctcccttggt	TCACTg	TTTTCCAG	AGCTggct
S. Sus	ttttgaat	gtaagatcacaca...603...cctggaattcctcccttggt	TCACTg	TTTTCCAG	AGCTggct
O. Avi	ttttgaat	gtaagatcaaaa...609...cctggaattcctcccttggt	TCACTg	TTTTCCAG	AGCTggct
L. Afr	ttttgaat	gtaagatcgtga...597...cctggaattcctcccttggt	TCACTg	TTTTCCAG	AGCTggct
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id=656473 gene=ENSG00000164190 name=NIPBL segment=chr5_36995907_36996573_1 type=IN VIEW

Figure 635:



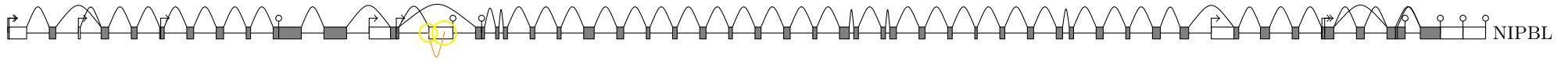
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R. Mac	ttttgaat	gtaagatcacaca...601...	-----cctttttgccagctgtgtgc	CTGGAATTCCTC	ccttgtttcactgtttccag	agctggct
P. Tro	ttttgaat	gtaagatcacaca...602...	-----cctttttgccagctgtgtgc	CTGGAATTCCTC	ccttgtttcactgtttccag	agctggct
P. Abe	ttttgaat	gtaagatcacaca...598...	-----cctttttgccagctgtgtgc	CTGGAATTCCTC	ccttgtttcactgtttccag	agctggct
C. Jac	ttttgaat	gtaagatcacaca...586...	-----cctttttgccagctgtgtgc	CTGGAATTCCTC	ccttgtttcactgtttccag	agctggct
C. Por	ttttgaat	gtaagtattata...556...	-----cctttttgccagctgtgtgc	CTGGAATTCCTC	ccttgtttcactgtttccag	agctggct
O. Cun	ttttgaat	gtaagatcatt...573...	-----cctttttgccagctgtgtgc	CTGGAATTCCTC	ccttgtttcactgtttccag	agctggct
C. Fam	ttttgaat	gtaagtaccaca...580...	-----cctttttgccagctgtgtgc	CTGGAATTCCTC	ccttgtttcactgtttccag	agctggct
B. Tau	ttttgaat	gtaagatcacaca...594...	-----cctttttgccagctgtgtgc	CTGGAATTCCTC	ccttgtttcactgtttccag	agctggct
E. Cab	ttttgaat	gtaagatcacaca...590...	-----cctttttgccagctgtgtgc	CTGGAATTCCTC	ccttgtttcactgtttccag	agctggct
S. Sus	ttttgaat	gtaagatcacaca...584...	-----cctttttgccagctgtgtgc	CTGGAATTCCTC	ccttgtttcactgtttccag	agctggct
O. Avi	ttttgaat	gtaagatcaaa...590...	-----cctttttgccagctgtgtgc	CTGGAATTCCTC	ccttgtttcactgtttccag	agctggct
L. Afr	ttttgaat	gtaagatcgta...572...	ggcttctccttttgcccagc	TGTGtc	CTGGAATTCCTC	ccttgtttcactgtttccag
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id=656473 gene=ENSG00000164190 name=NIPBL segment=chr5_36995907_36996573.1 type=IN

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P. Tro	tagtGAGG	gtAATTcaTCAGT	gtcaacggatttcttacat	----..202...	-tgttcgtttag	ttgctagg
P. Abe	tagtGAGG	gtAATTcaTCAGT	gtcaacggatttcttacat	----..206...	-tgttcgtttag	ttgctagg
C. Jac	tagtGAGG	gtAATTcaTCAGT	gtcaacggatttcttacat	----..208...	-tgttcatttag	ttgctagg
C. Por	tagtGAGG	gtAATTcaTCAGT	gtcaacggatttcttacat	----..178...	-tgttatttag	ttgctaga
O. Cun	tagtGAGG	gtAATTcaTCAGT	gtccaatggatttcttacat	----..216...	-cgttcatttag	tcgctaga
C. Fam	tagtGAGG	gtAATTcaTCAGT	gtcaacggatttcttacat	----..209...	-tgttatttag	ttgctaga
B. Tau	tagtGAGG	gtAATTcaTCAGT	gtcaatggatttcttactt	----..199...	ttgttca-ttttag	tcgctaga
E. Cab	tagtGAGG	gtAATTcaTCAGT	gtcaacggatttcttacat	----..210...	-ttttcatttag	ttgctaga
S. Sus	tagtGAGG	gtAATTcaTCAGT	gtcaacagatttcttacat	----..199...	-tgttcatttag	ttgctaga
O. Avi	tagtGAGG	gtAATTcaTCAGT	gtcaatggatttcttacat	----..184...	ttgttca-ttttag	tcgctaga
L. Afr	tagtGAGG	gtAATTcaTCAGTGTG	aacagatttcttacataaac	...196...	-tgttcatttag	tcgctaga
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Figure 636: CS=6.24



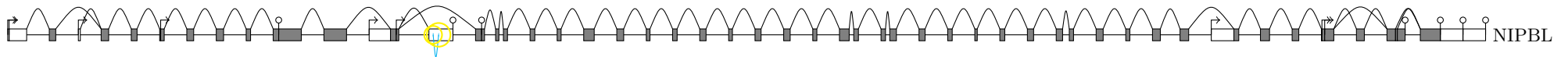
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R. Mac	ttttgaat	gtaagatcac...	607...	tg----	cccagctgtgcctggaa	TCCTCCCTTGTTTCACT	GTTTT	ccagagctggct
P. Tro	ttttgaat	gtaagatcac...	608...	tg----	cccagctgtgcctggaa	TCCTCCCTTGTTTCACT	GTTTT	.....	ccagagctggct
P. Abe	ttttgaat	gtaagatcac...	604...	tg----	cccagctgtgcctggaa	TCCTCCCTTGTTTCACT	GTTTT	.....	ccagagctggct
C. Jac	ttttgaat	gtaagatcac...	592...	tg----	cccagctgtgcctggaa	TCCTCCCTTGTTTCACT	GTTTT	.....	ccagagctggct
M. Mus	gtttgaat	gtaagatcatt...	551...	tg----	cccagctgtgcctggaa	TCCTCCCTTGTTTCACT	GTTTT	.....	ccagagctggct
R. Nor	ttttgaat	gtaagatcatt...	377...	tggggg	ttcagagtgcctac	-----	TGGAAGAGGTGACAC	ttgagtctggaaggacacctaggagatagccagataaaga	.....:tgacttcctcccttgtttcactgtttccagagctggct
C. Por	ttttgaat	gtaagattata...	562...	tg----	cccagctgtgcctggaa	TCCTCCCTTGTTTCACT	GTTTT	.....	ccagagctggct
O. Cun	ttttgaat	gtaagatcatt...	579...	tg----	cccagctgtgcctggaa	TCCTCCCTTGTTTCACT	GTTTT	.....	ccagagctggct
C. Fam	ttttgaat	gtaagaccaca...	586...	tg----	cccagctgtgcctggaa	TCCTCCCTTGTTTCACT	GTTTT	.....	ccagagctggct
B. Tau	ttttgaat	gtaagatcac...	600...	tg----	cccagctgtgcctggaa	TCCTCCCTTGTTTCACT	GTTTT	.....	ccagagctggct
E. Cab	ttttgaat	gtaagatcac...	596...	tg----	cccagctgtgcctggaa	TCCTCCCTTGTTTCACT	GTTTT	.....	ccagagctggct
S. Sus	ttttgaat	gtaagatcac...	590...	tg----	cccagctgtgcctggaa	TCCTCCCTTGTTTCACT	GTTTT	.....	ccagagctggct
O. Avi	ttttgaat	gtaagatcaaa...	596...	tg----	cccagctgtgcctggaa	TCCTCCCTTGTTTCACT	GTTTT	.....	ccagagctggct
L. Afr	ttttgaat	gtaagatcgta...	584...	tg----	cccagctgtgcctggaa	TCCTCCCTTGTTTCACT	GTTTT	ccagagctggct
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R. Mac	ttttccag	agctggcttctt...	286...	-----	ccacctagtgccatagatt	GAGGTGTGAcaAGCAAGGGcAGGAA	aggacagatgcatgcccatt	160...	gcaacttaatc-	aacagtta
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P. Abe	ttttccag	agctggcttctt...	286...	-----	ccacctagtgccatagatt	GAGGTGTGAcaAGCAAGGGcAGGAA	aggacagatgcatgctgccat	156...	tacagcaactt----	aacattta
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E. Cab	ttttccag	agctggcttctt...	288...	-----	ccacctagtgccatagatt	GAGGTGTGAcaAGCAAGGGcAGGAA	aggacagatgcatgctgctat	158..	aatagcaagtaatct	gat----
S. Sus	ttttccag	agctggcttctt...	288...	-----	tctcctagtgccatagatt	GAGGTGTGAcaAGCAAGGGcAGGAA	aggacagatgcatgctgccc	161..	tatagcaagtaatct	gac----
O. Avi	ttttccag	agctggcttctt...	288...	-----	ccacctagtatctgtagatt	GAGGTGTGAcaAGCAAGGGcAGGAA	aggacagatgcatgctgccc	158..	tacagcaaatatct	gac----
L. Afr	ttttccag	agctggcttctt...	288...	-----	tcacctagtgccatagatt	GAGGTGTGAcaAGCAAGGGcAGGAA	aggatagatgcatgctgctat	158..	ttcagtaaatatct	gac----
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id=656474 gene=ENSG00000164190 name=NIPBL segment=chr5_36996574_36997104.1 type=AN VIEW

Figure 637:



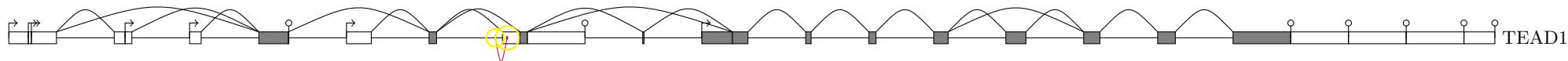
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R. Nor	ttttccag	agctggcttctt...45...ctagacttgctatacctcgc	CTGT	TTCC	ACTGG	ccactg-aaaaagtcttctt...398...tacaaccaagataatct	gac-----
C. Por	ttttccag	agctggcttctt...47...ctagacttgctatacctcgc	CTGT	TTCC	ACTGG	tccactg-aaaaagtcttctt...416...----caaagataatct	gacaatta
O. Cun	ttttccag	agctggcttctt...47...ctagacttgctatacctcgc	CTGT	TTCC	ACTGG	tccactg-aaaaagtcttctt...413...tgcagttaaagttaatct	gac-----
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L. Afr	ttttccag	agctggcttctt...47...ctagacttgctatacctcgc	CTGT	TTCC	ACTGG	tccactg-aaaaagtcttctt...409...ttcagtaaaattaatct	gac-----
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R. Mac	ttttccag	agctggcttctt...168...ttgtttgacttaaacggcat	TCAGTGGAAACAG	actatgggagatcttcactt...290...----gcaaacttaatc-	aacagtta
P. Tro	ttttccag	agctggcttctt...168...ttgtttgacttaaacggcat	TCAGTGGAAACAG	actatgggagatcttcactt...286...tacagcaaactt----	aacattta
P. Abe	ttttccag	agctggcttctt...168...ttgtttgacttaaacggcat	TCAGTGGAAACAG	actatgggagatcttcactt...286...tacagcaaactt----	aacattta
C. Jac	ttttccag	agctggcttctt...168...ttgtttgacttaaacggcat	TCAGTGGAAACAG	actatgggagatcttcactt...291...----gcaaacttaatc-	aacattta
M. Mus	ttttccag	agctggcttctt...168...ttgtttgacttaaacggcat	TCAGTGGAAACAG	actatgggagatcttcactt...281...tacaaccaagataatct	acc-----
R. Nor	ttttccag	agctggcttctt...166...ttgtttgacttaaacggcat	TCAGTGGAAACAG	actatgggagatcttcactt...279...tacaaccaagataatct	gac-----
C. Por	ttttccag	agctggcttctt...168...ttgtttgacttaaacggcat	TCAGTGGAAACAG	actatgggagatcttcactt...297...----caaagataatct	gacaatta
O. Cun	ttttccag	agctggcttctt...169...ttgtttgacttaaacggcat	TCAGTGGAAACAG	actatgggagatcttcactt...293...tgcagttaaagttaatct	gac-----
C. Fam	ttttccag	agctggcttctt...168...ttgtttgacttaaacggcat	TCAGTGGAAACAG	actatgggagatcttcactt...290...tatagcaaagttaatct	gac-----
B. Tau	ttttccag	agctggcttctt...168...ttgtttgacttaaacggcat	TCAGTGGAAACAG	actatgggagatcttcactt...290...tgcagcaaaattaatct	gac-----
E. Cab	ttttccag	agctggcttctt...167...ttgtttgacttaaacggcat	TCAGTGGAAACAG	actatgggagatcttcactt...291...aatagcaaagttaatct	gat-----
S. Sus	ttttccag	agctggcttctt...168...ttgtttgacttaaacggcat	TCAGTGGAAACAG	actatgggagatcttcactt...293...tatagcaaagttaatct	gac-----
L. Afr	ttttccag	agctggcttctt...168...ttgtttgacttaaacggcat	TCAGTGGAAACAG	actatgggagatcttcactt...290...ttcagtaaaattaatct	gac-----
	*****	*****	*****	*****	** *

id=656474 gene=ENSG00000164190 name=NIPBL segment=chr5_36996574_36997104_1 type=AN VIEW

Figure 638:



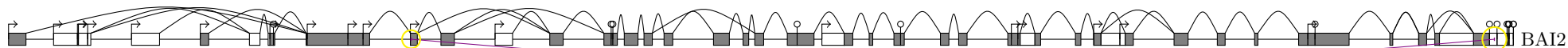
H. Sap	gaaaacag	gtaaaataaccc...2259...	caaagagtagcgattttata	TTTGATTTC	-TTTTTTGTT	ttgttttgttttgttttgtttt	-----	gttttgtttcccct-cataaacccgaacaatgtag	gtgtctag		
R. Mac	gaaaacag	gtaaaataaccc...2275...	caaagagtagcgattttata	TTTGATTTC	-TTTTTTGTT	-----	ttgttttgtttt	-----	gttttgtttcccct-cataaacccgaacaatgtag	gtgtctag	
P. Tro	gaaaacag	gtaaaataaccc...2260...	caaagagtagcgattttata	TTTGATTTC	-TTTTTTGTT	-----	ttgttttgtttt	-----	gttttgtttcccct-cataaacccgaacaatgtag	gtgtctag	
P. Abe	gaaaacag	gtaaaataaccc...2255...	cgaagagtagcgattttata	TTTGATTTC	-TTTTTTGTT	-----	ttgttttgtttt	-----	gttttgtttcccct-cataaacccgaacaatgtag	gtgtctag	
C. Jac	gaaaacag	gtaaaatatccc...2262...	caaggagtagagattttata	TTTGATTTC	-TTTTTTGTT	-----	ttgttttgtttt	-----	gttttgtttcccct-cataaacccgaacaatgtag	gtgtctag	
M. Mus	ggaagcag	gtacagtacccc...2285...	caagggaatagcgattttata	TTTGATTTC	-TTTTTTGTT	---	ttgttttgtttt	-----	gttttgtttcccct-cataaacccgaacaatgtag	gtgtctag	
C. Por	gaaagcag	gtacagtaaccc...2571...	caaggagtagcgattttata	TTTGATTTC	-TTTTTTGTT	---	ttgttttgtttt	-----	gttttgtttcccct-cataaacccgaacaatgtag	gtgtctag	
O. Cun	gaaaacag	gtacagtaaccc...2200...	ccagggaatagagattttata	TTTGATTTC	-TTTTTTGTT	---	ttgttttgtttt	-----	gttttgtttcccct-cataaacccgaacaatgtag	gtgtctag	
C. Fam	gaaaacag	gtaaaacaaccc...2286...	caaggagtagcgattttata	TTTGATTTC	TTTTTTTTGTT	---	ttgttttgtttt	-----	gttttgtttcccct-cataaacccgaacaatgtag	gtgtctag	
F. Cat	gaaaacag	gtaaaataacgt...2287...	caaggagtagcgattttata	TTTGATTTC	-TTTTTTGTT	---	ttgttttgtttt	-----	gttttgtttcccct-cataaacccgaacaatgtag	gtgtctag	
B. Tau	gaaaacag	gtaaaataaccc...2264...	caaggagtagcgattttata	TTTGATTTC	-TTTTTTGTT	---	ttgttttgtttt	-----	gttttgtttcccct-cataaacccgaacaatgtag	gtgtctag	
E. Cab	gaaaacag	gtaaaataacct...2282...	caaagagtagcaattttata	TTTGATTTC	-TTTTTTGTT	---	ttgttttgtttt	-----	gttttgtttcccct-cataaacccgaacaatgtag	gtgtctag	
O. Avi	gaaagcag	gtaaaataaccc...2263...	caaggagtagcgattttata	TTTGATTTC	-TTTTTTGTT	---	ttgttttgtttt	-----	gttttgtttcccct-cataaacccgaacaatgtag	gtgtctag	
L. Afr	gaaaacag	gtaaaataaccc...2894...	caaggagtagcgattttata	TTTGATTTC	-TTTTTTGTT	---	ttgttttgtttt	-----	gttttgtttcccct-cataaacccgaacaatgtag	gtgtctag	
	* * * * *	*** * * *	* * * * *	*****	*****		** * * * *	*****	*** * * * * *	***** * * * * *	*****

id=194980 gene=ENSG00000187079 name=TEAD1 segment=chr11.12883862.12886232.1 type=IN

H. Sap	caatgtag	gtgtctagtcataacaggtcct	AGCAAGAAAGAAAgt	TCGAG	aaattcaagccgccattaag...77...cctaccctgcag	gtgtctag
R. Mac	caatgtag	gtgtctagtcataacaggtcct	AGCAAGAAAGAAAgt	TCGAG	aaattcaagccgccattaag...77...cctaccctgcag	gtgtctag
P. Tro	caatgtag	gtgtctagtcataacaggtcct	AGCAAGAAAGAAAgt	TCGAG	aaattcaagccgccattaag...77...cctaccctgcag	gtgtctag
P. Abe	caatgtag	gtgtctagtcataacaggtcct	AGCAAGAAAGAAAgt	TCGAG	aaattcaagccgccattaag...77...cctaccctgcag	gtgtctag
C. Jac	caatgtag	gtgtctagtcataacaggtcct	AGCAAGAAAGAAAgt	TCGAG	aaattcaagccgccattaag...77...cctaccctgcag	gtgtctag
M. Mus	aaatgtag	gtgtctagtcataacaggtcct	AGCAAGAAAGAAAgt	TCGAG	aaattcaagccgccattaag...77...cctaccctgcag	gtgtctag
C. Por	caatgtag	gtgtctagtcataacaggtcct	AGCAAGAAAGAAAgt	TCGAG	aaattcaagccgccattaag...77...cctaccctgcag	gtgtctag
O. Cun	caatgtag	gtgtctagtcataacaggtcct	AGCAAGAAAGAAAgt	TCGAG	aaattcaagccgccattaag...77...cctaccctgcag	gtgtctag
C. Fam	caatgtag	gtgtctagtcataacaggtcct	AGCAAGAAAGAAAgt	TCGAG	aaattcaagccgccattaag...79...cctaccctgcag	gtgtctag
F. Cat	caatgtag	gtgtctagtcataacaggtcct	AGCAAGAAAGAAAgt	TCGAG	aaattcaagccgccattaag...77...cctaccctgcag	gtgtctag
B. Tau	caatgtag	gtgtctagtcataacaggtcct	AGCAAGAAAGAAAgt	TCGAG	aaattcaagccgccattaag...77...cctaccctgcag	gtgtctag
E. Cab	caatgtag	gtgtctagtcataacaggtcct	AGCAAGAAAGAAAgt	TCGAG	aaattcaagccgccattaag...77...cctaccctgcag	gtgtctag
O. Avi	caatgtag	gtgtctagtcataacaggtcct	AGCAAGAAAGAAAgt	TCGAG	aaattcaagccgccattaag...77...cctaccctgcag	gtgtctag
L. Afr	caatgtag	gtgtctagtcataacaggtcct	AGCAAGAAAGAAAgt	TCGAG	aaattcaagccgccattaag...77...cctaccctgcag	gtgtctag
	*****	*****	*****	*****	*****	*****

id=194981 gene=ENSG00000187079 name=TEAD1 segment=chr11.12886233.12886384.1 type=AN VIEW

Figure 639:



```

H.Sap  gtGTTCCAGGTgaGGAg
P.Tro  gtGTTCCAGGTgaGGAg
P.Abe  gtGTTCCAGGTgaGGAg
C.Jac  gtGTTCCAGGTgaGGAg
M.Mus  gtGTTCCAGGTgaGGAg
R.Nor  gtGTTCCAGGTgaGGAg
C.Por  gtGTTCCAGGTgaGGAg
O.Cun  gtGTTCCAGGTgaGGAg
C.Fam  gtGTTCCAGGTgaGGAg
B.Tau  gtGTTCCAGGTgaGGAg
E.Cab  gtGTTCCAGGTgaGGAg
S.Sus  gtGTTCCAGGTgaGGAg
L.Afr  gTGTTCAGGTgaGGAg
*****

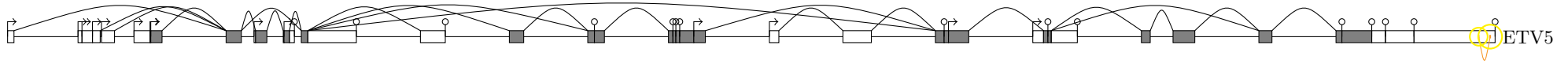
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id=534679 gene=ENSG00000121753 name=BAI2 segment=chr1.32210333.32210333.-1 type=AN

H.Sap	tgccacgc	tggactgcccactgca--tataaata-tatatatctctctattttcacaCTCCACTTtGGAACtaccaggagccagcgcctctcccctctccc	agggctgg
P.Tro	tgccacgc	tggactgcccactgca--tataaata-tatatatctctctattttcacaCTCCACTTtGGAACtaccaggagccagcgcctctcccctctccc	agggctgg
P.Abe	tgccacgc	tggactgcccactgca--tataaata-tatatatctctctattttcacaCTCCACTTtGGAACtaccaggagccagcgcctctcccctctccc	agggctgg
C.Jac	tgccacgc	tggactgcccactgca--tataaata-tatatatctctctattttcacaCTCCACTTtGGAACtaccaggagccagcgcctctcccctctccc	agggctgg
M.Mus	tgccacgc	cggactgcccactgca--cagaaa---tatata---tctattttcacaCTCCACTTtGGAACta-ccaggagccagcgcctctcccc--tccc	a-ggctgg
R.Nor	tgccacgc	cggactgcccactgca--cagaaa---tatata---tctattttcacaCTCCACTTtGGAACta-ccaggagccagcgcctctcccc--tccc	a-ggctgg
C.Por	tgccacgc	cggactgcccactgca--cagaaa---tatatatctctctattttcacaCTCCACTTtGGAACtaccaggagccggcgcctctcccc-ctccc	agggctgg
O.Cun	tgccacgc	tggactgcccactgca--tataaata-tatatatctctctattttcacaCTCCACTTtGGAACtgccaggagccagcgcctctcccctctccc	gggctgg
C.Fam	tgccacac	cggactgcccactgca--tataaata-tatatatctctctattttcacaCTCCACTTtGGAACcaccaggagccggcgcctctcccctctccc	agggctgg
B.Tau	tgccacgc	cggactgcccactgca--tataaata-tatatatctctctattttcacaCTCCACTTtGGAACtaccaggagccagcgcctctcccctctccc	agggctgg
E.Cab	tgccatgc	cggactgcccactgca--tataaata-tatatatctctctattttcacaCTCCACTTtGGAACtaccaggagccagcgcctctcccctctccc	agggctgg
S.Sus	tgccacgc	cggactgcccactgca--tataaata-tatatatctctctattttcacaCTCCACTTtGGAACtaccaggagccagcgcctctcccctctccc	agggctgg
L.Afr	tgccacgc	cggactgcccactgca--tataaata-tatatatctctctattttcacaCTCCACTTtGGAACtaccaggagccagcgcctctcccctctccc	acggctgg
	**** *	***** * ** ***** ***** ***** ** ** * ** * ** *	*****

id=534751 gene=ENSG00000121753 name=BAI2 segment=chr1.32192919.32193011.-1 type=EN VIEW

Figure 640:



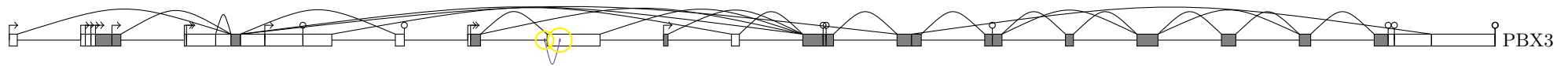
H. Sap	acatagaa	gggctctgattt...1771...--tttccagagtgtggaaagtc	TACAGTGCAGAA	aggcttgaacctgccagtg...97...caagcacc-cgaa	ctgcctc
R. Mac	acatagaa	gggctctgattt...1747...--tttccagagtgtggaaagtc	TACAGTGCAGAA	aggctttaaactgccagttg...97...caagcacc-tgaa	cctgcctc
P. Tro	acatagaa	gggctctgattt...1772...--tttccagagtgtggaaagtc	TACAGTGCAGAA	aggctttaaactgccagttg...97...caagcacc-cgaa	cctgcctc
P. Abe	acatagaa	gggctctgattt...1762...--tttccagagtgtggaaagtc	TACAGTGCAGAA	aggctttaaactgccagttg...97...caagcacc-cgaa	cctgcctc
C. Jac	acgtagaa	gggctctgattt...1754...--tttccagagtgtggaaagtc	TACAGTGCAGAA	aggctttaaactgccagttg...98...-aagcatttgaaa	cctgcctc
C. Por	acacagaa	gggctccagttt...1720...cttttccagagtgtggaaa--c	TACAGTGCAGAA	aggctttaaactgccggttg...99...-aagcacctgaaa	ccagcctc
O. Cun	acgtagaa	gggctccgattt...1736...--tttccagagtgtggaaagtc	TACAGTGCAGAA	aggcttcaacctgccagttg...98...-aagtgcctgggg	cccgcctc
C. Fam	acatagaa	gggctctgattt...1785...--tttccagagtgtggaaagtc	TACAGTGCAGAA	aggctttaaactgccagttg...98...-aagtgcctgaaa	cctgcctc
F. Cat	acgtagaa	gggctctgattt...1780...--tttccagagtgtggaaagtc	TACAGTGCAGAA	aggctttaaactgccagttg...98...-gagtgcctgaaa	cctgcctc
B. Tau	acatagaa	gggctctgattt...1692...--tttccagagtgtggaaaatc	TACAGTGCAGAA	aggctttaaactgccagttg...99...-gagtgcctgaaa	cccgcctc
E. Cab	acatagaa	gggctctgattt...1760...--tttccagagtgtggaaagtc	TACAGTGCAGAA	aggctttaaactgccagttg...98...-aactgcctgaaa	cccgcctc
O. Avi	acatagaa	gggctctgattt...1677...--tttccagagtgtggaaaatc	TACAGTGCAGAA	aggctttaaactgccagttg...99...-aagtgcctgaaa	cccgcctc
L. Afr	acagagaa	gggctctgattt...1778...--tttccagagtgtggaaagtc	TACAGTGCAGAA	aggctttacctgccagttg...97...-atgcgcctcgaa	cctgcctc
	** **	***** **	***** * ***** ** * ***** * **		** ** **

id=437708 gene=ENSG00000244405 name=ETV5 segment=chr3_185764097_185766040_-1 type=E3

H. Sap	acatagaa	gggctctgattt...1859...tcctgccaaagctgcgttata	TTCTGTACTgTGTA	caataaagaagtttgcttttcggtttaccaagcaccg-aa	cctgcctc
R. Mac	acatagaa	gggctctgattt...1835...tcctgccaaagctgcgttata	TTCTGTACTgTGTA	caataaagaagtttgcttttcggtttaccaagcactg-aa	cctgcctc
P. Tro	acatagaa	gggctctgattt...1860...tcctgccaaagctgcgttata	TTCTGTACTgTGTA	caataaagaagtttgcttttcggtttaccaagcaccg-aa	cctgcctc
P. Abe	acatagaa	gggctctgattt...1850...tcctgccaaagctgcgttata	TTCTGTACTgTGTA	caataaagaagtttgcttttcggtttaccaagcaccg-aa	cctgcctc
C. Jac	acgtagaa	gggctctgattt...1842...tcctgccaaagctgcgttata	TTCTGTACTgTGTA	caataaagaagtttgcttttcggtttaccaagcatttgaaa	cctgcctc
C. Por	acacagaa	gggctccagttt...1809...tcctgccaaagctgcgttata	TTCTGTACTgTGTA	caataaagaagtttgcttttcggtttaccaagcactgaaa	ccagcctc
O. Cun	acgtagaa	gggctccgattt...1824...ccctgccaaagctgcgttata	TTCTGTACTgTGTA	caataaagaagtttgcttttcggtttaccaagtgctgggg	cccgcctc
C. Fam	acatagaa	gggctctgattt...1873...tcctgccaaagctgcgttata	TTCTGTACTgTGTA	caataaagaagtttgctttcagttttaccaagtgcctgaaa	cctgcctc
F. Cat	acgtagaa	gggctctgattt...1868...tcctgccaaagctgcgttata	TTCTGTACTgTGTA	caataaagaagtttgctttcagttttaccgagtgctgaaa	cctgcctc
B. Tau	acatagaa	gggctctgattt...1781...tcctgccaaagctgcgttata	TTCTGTACTgTGTA	caataaagaagtttgctttcagttttaccgagtgctgaaa	cccgcctc
E. Cab	acatagaa	gggctctgattt...1848...tcctgccaaagctgcgttata	TTCTGTACTgTGTA	caataaagaagtttgctttcagttttaccaactgcctgaaa	cccgcctc
O. Avi	acatagaa	gggctctgattt...1766...tcctgccaaagctgcgttata	TTCTGTACTgTGTA	caataaagaagtttgctttcagttttaccaagtgcctgaaa	cccgcctc
L. Afr	acagagaa	gggctctgattt...1865...tcctgccaaagctgcgttata	TTCTGTACTgTGTA	caataaagaagtttgctttcagttttaccatgcgcctcgaa	cctgcctc
	** **	***** **	***** * ***** ** * ***** * **		** ** **

id=437708 gene=ENSG00000244405 name=ETV5 segment=chr3_185764097_185766040_-1 type=E3 VIEW

Figure 641: CS=7.8



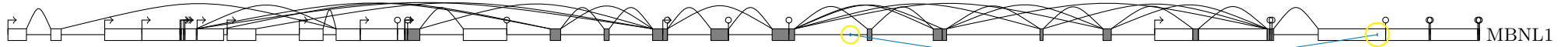
H. Sap	gatgagag	gtacagaattac...686...	---taaattaaaaatgtcaaac	ATGAAGgCATAATGG	-----	-----aagtaatca-tttttacatag	ttttaagc
R. Mac	gatgagag	gtacagaattac...688...	---taaattaaaaatgtcaaac	ATGAAGgCATAATGG	-----	-----aagtaatca-tttttacatag	ttttaagc
P. Tro	gatgagag	gtacagaattac...628...	..gcattctttgagtggtg	---attTTGGTTC	TgaAAAGT	atgcttaaataattacaggtgtttaaat	ttttaagc
P. Abe	gatgagag	gtacagaattac...696...	---taaattaaaaatgtcaaac	ATGAAGgCATAATGG	-----	-----aagtaatca-tttttacatag	ttttaagc
C. Jac	gatgagag	gtacagaattac...693...	---taaattaaaaatgtcaaac	ATGAAGgCATAATGG	-----	-----aagtaatca-tttttacatag	ttttaagc
M. Mus	gatgagag	gtacagaattac...672...	---taaattaaaaatgtcaaac	ATGAAGgCATAATGG	-----	-----aagtaatca-tttttacatag	ttttaagc
R. Nor	gatgagag	gtacagaattac...668...	---taaattaaaaatgtcaaac	ATGAAGgCATAATGG	-----	-----aagtaatca-tttttacatag	ttttaagc
C. Por	gatgagag	gtacagaattac...675...	---taaattaaaaatgtcaaac	ATGAAGgCATAATGG	-----	-----aagtaatca-tttttacatag	ttttaagc
O. Cun	gatgagag	gtacagaattac...673...	---taaattaaaaatgtcaaac	ATGAAGgCATAATGG	-----	-----aagtaatca-tttttatata	ttttaagc
C. Fam	gatgagag	gtacagaattac...702...	---taaattaaaaatgtcaaac	ATGAAGgCATAATGG	-----	-----aagtaatca-tttttacatag	ttttaagc
E. Cab	gatgagag	gtacagaattac...702...	---taaattaaaaatgtcaaac	ATGAAGgCATAATGG	-----	-----aagtaatca-tttttacatag	ttttaagc
S. Sus	gatgagag	gtacagaattac...695...	---taaattaaaaatgtcaaac	ATGAAGgCATAATGG	-----	-----aagtaatcattttttacatag	ttttaaga
L. Afr	gatgagag	gtacagaattac...684...	---taaattaaaaatgtcaaac	ATGAAGgCATAATGG	-----	-----aagtaatca-tttttacatag	ttttaagc
	*****	*****	* ** * ** * **			***** *****	*****

id=19698 gene=ENSG00000167081 name=PBX3 segment=chr9_128606092_128606844.1 type=IN

H. Sap	ttacatag	ttttaagcagta...55...	aattcaaaggacaaaagaga	TCATTATGCTTTGT	-----	-----tacctcagctagttcattac	gtgagggt
R. Mac	ttacatag	ttttaagcagta...55...	aattcaaaggacaaaagaga	TCATTATGCTTTGT	-----	-----tacctcagctagttcattac	gtgagggt
P. Tro	ttacatag	ttttaagcagta...132...	..tcttggaaagaaaactctggg	-----	GCTTTaAGAAgaTCAA	cacc-----agcaccttatggcaca...	gtgagggt
P. Abe	ttacatag	ttttaagcagta...55...	aattcaaaggacaaaagaga	TCATTATGCTTTGT	-----	-----tacctcagctagttcattac	gtgagggt
C. Jac	ttacatag	ttttaagtagta...55...	aattcaaaggacaaaagaga	TCATTATGCTTTGT	-----	-----tacctcagctagttcattac	gtgagggt
M. Mus	ttacatag	ttttaagcagta...56...	aattcaaaggacaaaagagc	TCATTATGCTTTGT	-----	-----tacctcagctagttcattac	gtgagggt
R. Nor	ttacatag	ttttaagcagta...56...	aattcaaaggacaaaagagc	TCATTATGCTTTGT	-----	-----tacctcagctagttcattac	gtgagggt
C. Por	ttacatag	ttttaagcagta...56...	aattcaaaggacaaaagaga	TCATTATGCTTTGT	-----	-----tacctcagctagttcattac	gtgagggt
O. Cun	ttatata	ttttaagcagta...56...	aattcaaaggacaaaagaga	TCATTATGCTTTGT	-----	-----tacctcagctagttcattac	gtgagggt
C. Fam	ttacatag	ttttaagcagta...59...	aattcaaaggacaaaagaga	TCATTATGCTTTGT	-----	-----tacctcagctagttcattac	gtgagggt
E. Cab	ttacatag	ttttaagcagta...56...	aattcaaaggacaaaagaga	TCATTATGCTTTGT	-----	-----tacctcagctagttcattac	gtgagggt
S. Sus	ttacatag	ttttaagaagta...56...	aattcaaaggacaaaagaga	TCATTATGCTTTGT	-----	-----tacctcagctagttcattac	gtgagggt
L. Afr	ttacatag	ttttaagcagta...57...	aattcaaaggacaaaagaga	TCATTATGCTTTGT	-----	-----tacctcagctagttcattac	gtgagggt
	*** **	***** **	** ** * * *	*****		*** ** * **	***** ** * **

id=19699 gene=ENSG00000167081 name=PBX3 segment=chr9_128606845_128607261.1 type=AN VIEW

Figure 642: CS=3.9



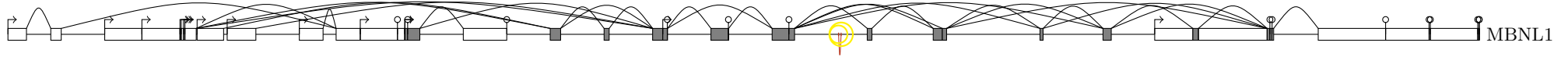
H. Sap	ctgccatg	gtgagtagagat...921...-caaagaggag-ttatcctccc	AATAAcaACTCagTAGT	gcctttattgtgcatgctta...162...ctgctaattaag	actcagtc
R. Mac	ctgccatg	gtgagtagagat...925...-caaagaggag-ttatcctccc	AATAAcaACTCagTAGT	gcctttattgtgcatgctta...162...ctgctaattaag	actcagtc
P. Tro	ctgccatg	gtgagtagagat...924...-caaagaggag-ttatcctccc	AATAAcaACTCagTAGT	gcctttattgtgcatgctta...162...ctgctaattaag	actcagtc
P. Abe	ctgccatg	gtgagtagagat...922...-caaagaggag-ttatcctccc	AATAAcaACTCagTAGT	gcctttattgtgcatgctta...162...ctgctaattaag	actcagtc
C. Jac	ctgccatg	gtgagtagaaac...922...-aaagaggagt-ttatcctccc	AATAAcaACTCagTAGT	gcctttattgtgcatgctta...162...ctgctaattaag	actcagtc
M. Mus	ctgccatg	gtgagtgagac...920...-acaagaggaa-ttatcctcc-	AATAAcaACTCaaTAGT	gcctttattgtgcatgctta...161...ctgctaattaag	actcagtc
C. Por	ctgccatg	gtgagtatagac...893...-caaagaggaa-ttatcctctc	AATAAcaACTCaaTAGT	gcctttattgtgcatgctta...162...ctgctaattaag	actcagtc
O. Cun	ctgccatg	gtgagtagagac...931...-caaagaggag-ttatcctccc	AATAAcaACTCaaTAGT	gcctttattgtgcatgctta...162...ctgctaattaag	actcagtc
C. Fam	ctgccatg	gtgagtagcggc...976...-caaagaggag-ttatcctccc	AATAAcaACTCagTAGT	gcctttattgtgcatgctta...162...ctgctaattaag	actcagtc
B. Tau	ctgccatg	gtgagtagagat...948...-cgaagaggag-ttatcctccc	AATAAcaACTCagTAGT	gcctttattgtgcatgctta...162...ctgctaattaag	actcagtc
E. Cab	ctgccatg	gtgagtagggca...938...-gaagaggag-ttatcctccc	AATAAcaACTCagTAGT	gcctttattgtgcatgctta...162...ctgctaattaag	actcagtc
S. Sus	ctgccatg	gtaagtagagac...923...-caaagaggag-ttatcctccc	AATAAcaACTCagTAGT	gcctttattgtgcatgctta...162...ctgctaattaag	actcagtc
L. Afr	ctgccatg	gtgagtgaggc...965...-caaagaggag-ttatcctccc	AATAAcaACTCagTAGT	gccttattgtgcatgctta...161...ctgctaattaag	actcagtc
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id=512922 gene=ENSG00000152601 name=MBNL1 segment=chr3.152163329.152164492.1 type=IN

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P. Tro	ccttgtag	atcatgctaaag...634...tgccatagactgtacatcaa	ATTAGAGT	TTATT	tcttcagtgttattgttttc...68...tntttttgaaac	caaagctg
P. Abe	tcttgtag	atcatgctaaag...629...tgccatagactgtacatcaa	ATTAGAGT	TTATT	tcttcagtgttattgttttc...63...tntttttgaaac	caaagctg
C. Jac	ccttgtag	atcacgctaaag...629...tgccatagactgtacatcaa	ATTAGAGT	TTATT	tcttcagtgttattgttttc...70...tntttttgaaac	caaagctg
M. Mus	tattctag	atcatacaaaag...625...tgccatagactgtacatcaa	ATTAGAGT	TTATT	tcttcagtgttattgttttc...65...tntttttgaaac	caaagctg
C. Por	ccttgtag	atcataactaaag...631...tgccatagactgtacatcaa	ATTAGAGT	TTATT	tcttcagtgttattgttttc...75...tntttttgaaac	caaagctg
O. Cun	ccttgtag	atcataactaaag...629...tgccatagactgtacatcaa	ATTAGAGT	TTATT	tcttcagtgttattgttttc...57...tntttttgaaac	caaagctg
C. Fam	ccttgtag	atcataactaaag...629...tgccatagactgtacatcaa	ATTAGAGT	TTATT	tcttcagtgttattgttttc...99...tntttttgaaac	caaagctg
B. Tau	ccttgtag	atcgtaactaaag...628...tgccatagactgtacatcaa	ATTAGAGT	TTATT	tcttcagtgttattgttttc...59...tntttttgaaac	caaagctg
E. Cab	ccttgtag	atcataactaaag...629...tgccatagactgtacatcaa	ATTAGAGT	TTATT	tcttcagtgttattgttttc...59...tntttttgaaac	caaagctg
S. Sus	ccttgtag	atcataactaaag...629...tgccatagactgtacatcaa	ATTAGAGT	TTATT	tcttcagtgttattgttttc...78...tntttttgaaac	caaagctg
L. Afr	ccttgtag	atcgtaactacag...644...tgccatagactgtacatcaa	ATTAGAGT	TTATT	tcttcagtgtaaaactgttt...76...tntttttgaaac	caaagctg
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id=512939 gene=ENSG00000152601 name=MBNL1 segment=chr3.152180174.152180948.1 type=EN VIEW

Figure 643:



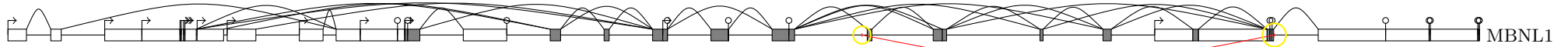
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R.Mac	ctgccatg	gtgagtagagat...789...--gatattaatcatgagagaga	TCTT	CTGTGTTTGTTTA	tgatacttgagcaaaaata...296...ctgctaattaag	actcagtc
P.Tro	ctgccatg	gtgagtagagat...790...--tgaataatcacgagagaga	TCTT	CTGTGTTT	---atggatacttgagcaaaaat-...299...ctgctaattaag	actcagtc
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C.Jac	ctgccatg	gtgagtagaaca...787...--tgaataatcacgagagaga	TCTT	CTGTGTTTGTTTA	tgatacttgagcaaaaata...295...ctgctaattaag	actcagtc
M.Mus	ctgccatg	gtgagtggagac...781...-gtaaaatgatcatgagagag	GTCTT	CTGTGTTTGTTTA	tgatacttgagcaaaaata...297...ctgctaattaag	actcagtc
R.Nor	ctgccatg	gtgagtggagac...773...-gtaaaatggtcatgagagag	GTCTT	CTGTGTTTGTTTA	tgatacttgagcaaaaata...299...ctgctaattaag	actcagtc
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C.Fam	ctgccatg	gtgagtgcggc...834...-gccaaataatcacgagagag	GTCTT	CTGTGTTTGTTTA	cggatacttgagcaaaaata...301...ctgctaattaag	actcagtc
F.Cat	ctgccatg	gtgagtagagac...806...-gtaaagtaatcacgagagag	GTCTT	CTGTGTTTGTTTA	tgatacttgagcaaaaata...300...ctgctaattaag	actcagtc
B.Tau	ctgccatg	gtgagtagagat...799...-agtcaaatagttacg-gagag	GTCTT	CTGTGTTTGTTTA	tgatacttgagcaaaaata...308...ctgctaattaag	actcagtc
E.Cab	ctgccatg	gtgagtgggca...799...-gtaccataatcacgagagag	GTCTT	CTGTGTTTGTTTA	tgatacttgagcaaaaata...297...ctgctaattaag	actcagtc
S.Sus	ctgccatg	gtgagttagagac...784...-gtaaaataaccatgagagag	GTCTT	CTGTGTTTGTTTA	tgatacttgagcaaaaata...298...ctgctaattaag	actcagtc
O.Avi	ctgccatg	gtgagtagagac...799...-agtcaaatagttacg-gagag	GTCTT	CTGTGTTTGTTTA	tgatacttgagcaaaaata...307...ctgctaattaag	actcagtc
L.Afr	ctgccatg	gtgagtggaggc...827...-agtcaaacagtt-tgagagag	GTCTT	CTGTGTTTGTTT	ctggatacttgagcaaaaat-...297...ctgctaattaag	actcagtc
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id=512922 gene=ENSG00000152601 name=MBNL1 segment=chr3_152163329_152164492.1 type=IN

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R.Mac	ctgccatg	gtgagtagagat...816...-tgtgtttgtttatggatact	TGAGCAAAAATACAGAAGG	cagactctctcctcctcctct-...269...ctgctaattaag	actcagtc
P.Tro	ctgccatg	gtgagtagagat...820...-----gtttatggatacttgagcaa	AAATACAGAAGG	cagactctctcctcctcctct-...271...ctgctaattaag	actcagtc
P.Abe	ctgccatg	gtgagtagagat...819...-----gtttatggatacttgagcaa	AAATACAGAAGG	cagactctctcctcctcctct-...270...ctgctaattaag	actcagtc
C.Jac	ctgccatg	gtgagtagaaca...814...-tgtgtttgtttatggatact	TGAGCAAAAATACAGAAGG	cagactctctcctcctcctct-...268...ctgctaattaag	actcagtc
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C.Fam	ctgccatg	gtgagtgcggc...862...-tgtgtttgtttacggatact	TGAGCAAAAATACAGAAGGC	cagactctctcctcctcctct-...273...ctgctaattaag	actcagtc
F.Cat	ctgccatg	gtgagtagagac...834...-tgtgtttgtttatggatact	TGAGCAAAAATACAGAAGGC	cagactctctcctcctcctct-...272...ctgctaattaag	actcagtc
B.Tau	ctgccatg	gtgagtagagat...827...-tgtgtttgtttatggatact	TGAGCAAAAATACAGAAGGC	cagactctctcctcctcctct-...280...ctgctaattaag	actcagtc
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id=512922 gene=ENSG00000152601 name=MBNL1 segment=chr3_152163329_152164492.1 type=IN VIEW

Figure 644:



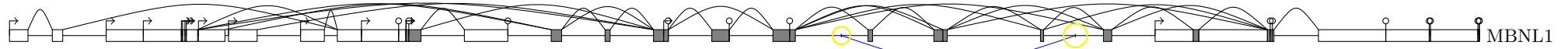
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R.Mac	ctgccatg	gtgagtagagat...671...-----gagccattcttgttcttt	GCTTAgCTGT	TTTAatgttgt-cattttttacata...419...ctgctaattaag	actcagtc		
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P.Abe	ctgccatg	gtgagtagagat...1059...-----tgcccccatgatgcac-ctct	GCTT-GCTG-TTTA	-tgtaaatgcgcttgaacccc...30...ctgctaattaag	actcagtc		
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O.Avi	ctgccatg	gtgagtagagac...678...-----tgagtcagt-tttgttcttt	GCTTAgCTGT	TTTAatgttgtccttttttttttaa...434...ctgctaattaag	actcagtc		
L.Afr	ctgccatg	gtgagtgaggc...707...-----gagtcattctctgttcttt	GCTTAgCTGT	TTTAatgttgtcctttttttttt...422...ctgctaattaag	actcagtc		
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id=512922 gene=ENSG00000152601 name=MBNL1 segment=chr3.152163329.152164492.1 type=IN

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R.Mac	agatgtag	aattttcatcacTAAACA	GTAAGTtc
P.Tro	agatgtag	aattttcatcacTAAACA	GTAAGTtc
P.Abe	agatgtag	aattttcatcacTAAACA	GTAAGTcc
C.Jac	agatgtag	aattttcatcacTAAACA	GTAAGTtc
C.Por	agatgtag	aattgtcatcacTAAACA	GTAAGTtc
O.Cun	agatgtag	aatttccatcacTAAACA	GTAAGTtc
C.Fam	agatgtag	aattttcatcacTAAACA	GTAAGTtc
B.Tau	agatgtag	aattttcatcacTAAACA	GTAAGTtc
E.Cab	agatgtag	aattttcatcacTAAACA	GTAAGTtc
S.Sus	agatgtag	aattttcatcacTAAACA	GTAAGTtc
O.Avi	agatgtag	aattttcatcacTAAACA	GTAAGTtc
L.Afr	agatgtag	aatttccatcacTAAACA	GTAAGTtc
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id=512937 gene=ENSG00000152601 name=MBNL1 segment=chr3.152177117.152177134.1 type=EN VIEW

Figure 645:



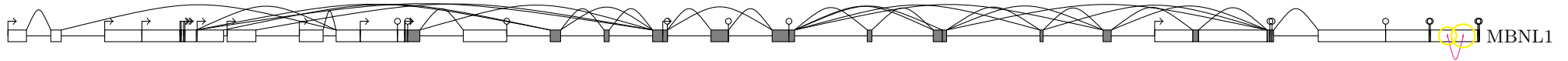
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R. Mac	ctgccatg	gtgagtagagat...802...	-----agagagatctttctgtgtt	---	TGTTT	ATGGAT	TTGAGCAAAA	ATACAG	aaggcagactctctcctct	----	..273..	ctgctaattaag	actcagtc	
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R. Nor	ctgccatg	gtgagtaggagac...801...	-----	---	tgtgtttgtttatggatact	---	TGAGCAAAA	ATACAGAAGG	cagactctctcctttctct	..	272..	ctgctaattaag	actcagtc	
C. Por	ctgccatg	gtgagtagagac...786...	-----	---	ctgtgttta-ttatggatact	---	TGAGCAAAA	ATACAGAAGG	cagactctctcctttctct	..	267..	ctgctaattaag	actcagtc	
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C. Fam	ctgccatg	gtgagtagggc...862...	-----	---	tgtgtttgtttacggatact	---	TGAGCAAAA	ATACAGAAGG	cagactctctcctctctct	..	274..	ctgctaattaag	actcagtc	
F. Cat	ctgccatg	gtgagtagagac...820...	-----agagaggtctttctgtgtt	---	TGTTT	ATGGAT	TTGAGCAAAA	ATACAG	aaggcagactctctcctct	----	..277..	ctgctaattaag	actcagtc	
B. Tau	ctgccatg	gtgagtagagat...827...	-----	---	tgtgtttgtttatggatact	---	TGAGCAAAA	ATACAGAAGG	cagactctctcctctctct	..	281..	ctgctaattaag	actcagtc	
E. Cab	ctgccatg	gtgagtagggc...820...	-----	---	tctttctgtgttttggatact	---	TTGAGCAAAA	ATACAG	aaggcagactctctcctct	----	..274..	ctgctaattaag	actcagtc	
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O. Avi	ctgccatg	gtgagtagagac...827...	-----	---	tgtgtttgtttatggatact	---	TGAGCAAAA	ATACAGAAGG	cagactctctcctctctct	..	280..	ctgctaattaag	actcagtc	
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P. Tro	aagtgttg	gtaggtgccagc...319..	-tgtatatatgaagtaaac	---	TTGTATTTT	GaCTTAGATTTT	GAATGT	-ctgactatgaacactatataaaaattctgtttttg	::::	:	tatggtcgttatatgat	tttccctccgaaag	ttcccatg
P. Abe	aagtgttg	gtaggtgccagc...316..	-tgtatatatgaagtaaac	---	TTGTATTTT	GaCTTAGATTTT	GAATGT	-ctgactatgaacactatataaaaattctgtttttg	::::	:	tatggtcgttatatgat	tttccctccgaaag	ttcccatg
M. Mus	aagtgttg	gtaggtgccagc...616..	.tggtttccatattgcta-cac	---	CTTCTGTATg	TTTGCTTA	-----	-----	::::	:	-----	-----	-----
R. Nor	aagtgttg	gtaggtgccagc...609..	.tggtttccatattgcta-cac	---	CTTCTGTATg	TTTGCTTA	-----	-----	::::	:	-----	-----	-----
C. Por	aagtgttg	gtaggtgccagc...617..	.tggtttccatattgcta-cac	---	CTTCTGTATg	TTTGCTTA	-----	-----	::::	:	-----	-----	-----
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C. Fam	aagtgttg	gtaggtgccagc...616..	.tggtttccatattgcta-cac	---	CTTCTGTATg	TTTGCTTA	-----	-----	::::	:	-----	-----	-----
F. Cat	aagtgttg	gtaggtgccagc...321..	-tgtatatatgaagtaaac	---	CTGTATTTT	GaCTTAGATTTT	GAATG	-tctgactgtgaacactatataaaaattctgtttttg	::::	:	tatggttgcgttatatgat	tttccctccgaaag	ttcccatg
B. Tau	aagtgttg	gtaggtgccagc...623..	.tggtttccatattgcta-cac	---	CTTCTGTATg	TTTGCTTA	-----	-----	::::	:	-----	-----	-----
E. Cab	aagtgttg	gtaggtgccagc...315..	-tgtatatatgaagtaaac	---	CTGTATTTT	GaCTTAGATTT	-----	-----	::::	:	tatggttgcgttatatgat	tttccctccgaaag	ttcccatg
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O. Avi	aagtgttg	gtaggtgccagc...622..	.tggtttccatattgcta-cac	---	CTTCTGTATg	TTTGCTTA	-----	-----	::::	:	-----	-----	-----
L. Afr	aagtgttg	gtaggtgccagc...313..	-tatatagatgaagtaaac	---	CTGTATTTT	GaCTTAGA	TGTTT	Gactgtctgactatgaacattatataaaaattctgtttgtg	::::	:	tatggttgcgttatatgat	tttccctccgaaag	ttcccatg
	*****	*****			*	*	**	*****			*****	*****	*****

id=512929 gene=ENSG00000152601 name=MBNL1 segment=chr3.152173367.152174055.1 type=IN VIEW

Figure 647:



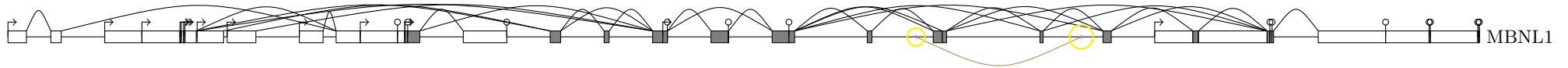
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R. Mac	aaaagaga	gaactatactaa...151...--ttttaattgctgtaggatcc-----	TGTTCTTTTCAGCAGGTGAAA	-----aataaaacgcagttcaaatt...309...gcctaataaaaa	cttctctt
P. Tro	gagagaaa	gaactatactaa...151...--ttttaattgctgtaggatcc-----	TGTTCTTTTCAGCAGGTGAAA	-----aataaaacgcagttcaaatt...309...gcctaataaaaa	cttctctt
P. Abe	gagagaaa	caactatactaa...151...--ttttaattgctgtaggatcc-----	TGTTCTTTTCAGCAGGTGAAA	-----aataaaacgcagttcaaatt...310...gcctaataaaaa	cttctctt
C. Jac	gagagaaa	gaactatactaa...152...--ttttaattgctgtaggatcc-----	TGTTCTTTTCAGCAGGTGAAA	-----aataaaacgcagttcaaatt...309...gcctaataaaaa	cttctctt
M. Mus	gagagaaa	gaactatgctaa...147...-ttttaattgctgta-gatca-----	TGTTCTTTTCAGCAGGTGAAA	-----aataaaacgcagttcaaatt...317...gcctaataaaaa	cttctctt
R. Nor	gagagaaa	gaactatgctaa...144...tgtttaaccgctttagagc-----	TGTTCTTTTCAGCAGGTGAAA	-----acaactccaatttcacag...296...gcctaataaaaa	cttctctt
C. Por	aaaagaaa	gaactatactaa...151...--ttttaattgctgtaggatcc-----	TGTTCTTTTCAGCAGGTGAAA	-----aataaaacgcagttcaaatt...315...gcctaataaaaa	cttctctt
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E. Cab	gagagaaa	gaactatactaa...155...--ttttaattgctgtaggagc-----	CTGTTCTTTTCAGCAGGTGAAA	-----aaataaaacacagttcaaatt...306...gcctaataaaaa	cttctctt
S. Sus	caaaaaaa	gaactatactaa...160...--ttttaattgctgtaggatcc-----	CTGTTCTTTTCAGCAGGTGAAA	-----aaataaaacacagttcaaatt...310...gcctaataaaaa	cttctctt
L. Afr	gagagaaa	gaactatactaa...147...-atTTTTCTTTTTTTTaatGCTATATGatCCTGTTTTTTTCAGCAGGT	-----aaaaaaagtgaacacagtt-----	...314...gcctaataaaaa	cttctctt
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id=512942 gene=ENSG00000152601 name=MBNL1 segment=chr3.152183008.152183552.1 type=EN

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R. Mac	aaaagaga	gaactatactaa...325...--cttatcagcaaccctaccac-	TTTCATCTGCTGAAAGGACA	aatgtgcttggttttactat-----	...135...gcctaataaaaa	cttctctt
P. Tro	gagagaaa	gaactatactaa...325...--cttatcagcaaccctaccac-	TTTCATCTGCTGAAAGGACA	aatgtgcttggttttactat-----	...135...gcctaataaaaa	cttctctt
P. Abe	gagagaaa	caactatactaa...326...--cttatcagcaaccctaccac-	TTTCATCTGCTGAAAGGACA	aatgtgcttggttttactat-----	...135...gcctaataaaaa	cttctctt
C. Jac	gagagaaa	gaactatactaa...326...--cttatcagcaaccctaccac-	TTTCATCTGCTGAAAGGACA	aatgtgcttggttttactat-----	...135...gcctaataaaaa	cttctctt
M. Mus	gagagaaa	gaactatgctaa...330...--ttaccagcaaccctaccac-	TTTCATCTGCTGAAAGGACA	gtgagcttggttttactatt-----	...134...gcctaataaaaa	cttctctt
R. Nor	gagagaaa	gaactatgctaa...309...cacttaccagcaaccctaccac-	TTTCATCTGCTGAAAGGACA	atgtgcttggttttactatt-----	...131...gcctaataaaaa	cttctctt
C. Por	aaaagaaa	gaactatactaa...331...--cttatcagcagcctaccac-	TTTCATCTGCTGAAAGGACA	aacgtgcttggttttactat-----	...135...gcctaataaaaa	cttctctt
O. Cun	aagagaaa	gaactatactaa...331...-acttatccgcaaccctaccac-	TTTCATCTGCTGAAAGGACA	aatgtgcttggttttactat-----	...135...gcctaataaaaa	cttctctt
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L. Afr	gagagaaa	gaactatactaa...338...--ttcagcaaccctaccctttc-	ATCTGCTGAAAGGACAGGTGGT	TGGTtttactattgtaatacaca...	...123...gcctaataaaaa	cttctctt
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id=512942 gene=ENSG00000152601 name=MBNL1 segment=chr3.152183008.152183552.1 type=EN VIEW

Figure 648:



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R.Mac  ttgacctg  gtactatgacct...618...-----actagtgagatgtttgtttgGACAAAAATAatGCTTcctttaagcttttatcttg-...159...ttcactaaa--ca  g  ggaattcc
P.Abe  ttgacctg  gtactatgacct...618...-----actagtgagatgtttgtttgGACAAAAATAatGCTTcctttaagcttttatcttg-...163...ttcactaaa--ca  g  ggaattcc
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L.Afr  ttgacctg  gtactatgacct...631...-----actagtggggtttgttttccaGACAAAAATAatGCTTccttcaagcttttatcttg-...166...ttcactaaa--ca  g  ggaattcc
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id=512924 gene=ENSG00000152601 name=MBNL1 segment=chr3_152164547_152165408.1 type=IN

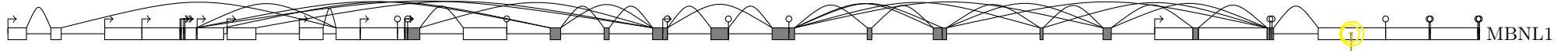
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R.Mac  aagtgttg  gtaggtgccagc...392...tgttttgacttagcatattAAGCcTGTtTgTGTCaatTTtcttgatttgatggt----...218...tcctccgaaag  ttcccatg
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id=512929 gene=ENSG00000152601 name=MBNL1 segment=chr3_152173367_152174055.1 type=IN VIEW

Figure 649:



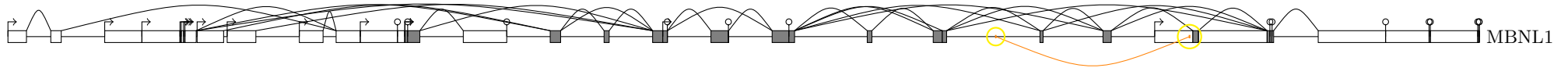
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E.Cab	ccttgtag	atcactactaaag...317...tatggtgtaaccacgattct	ATTATGTA	TTGGTACGtc	TGTAga	CCAAg	ATATAAAT	-tttttaaaaaaagtttatt...348...ttttttggaac	caaagctg
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	** **	*** * *	***** **	**	***** **	***	*****	* ** *	*****

id=512939 gene=ENSG00000152601 name=MBNL1 segment=chr3.152180174.152180948.1 type=EN

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R.Mac	ccttgtag	atcatgctaaag...317...tatggtgtaaccatgattct	ATTATGTA	TTGGTACGtc	TGTAga	CCAAg	ATATAAAT	-tttttaaaaaaagtttatt...366...ttttttggaac	caaagctg
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C.Jac	ccttgtag	atcacgctaaag...317...tatggtgtaaccatgattct	ATTATGTA	TTGGTACGtc	TGTAga	CCAAg	ATATAAAT	-tttttaaaaaaagtttatt...360...tggtttggaac	caaagctg
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id=512939 gene=ENSG00000152601 name=MBNL1 segment=chr3.152180174.152180948.1 type=EN VIEW

Figure 650:



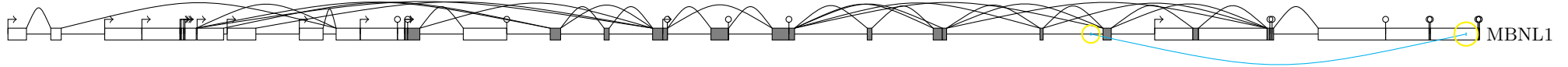
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R.Mac	cccaccag	gtaaggggtggg...4936...-----c	tttcaaatccac	cttctc	GTTGca	ATGCATGA	GGGCaG	GCT	caata
P.Tro	cccaccag	gtaaggggtggg...4936...-----c	tttcaaatccac	cttctc	GTTGca	ATGCATGA	GGGCaG	GCT	caata
P.Abe	cccaccag	gtaaggggtggg...4936...-----c	tttcaaatccac	cttctc	GTTGca	ATGCATGA	GGGCaG	GCT	caata
C.Jac	cccaccag	gtaaggggtggg...4936...-----c	tttcaaatccac	cttctc	GTTGca	ATGCATGA	GGGCaG	GCT	caata
C.Por	cccaccag	gtaagggcatgg...4936...-----c	tttcaaatccac	cttctc	GTTGca	ATGCATGA	GGGCaG	GCT	caata
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C.Fam	cccaccag	gtaaggggtctg...4936...-----c	tttcaaatccac	cttctc	GTTGca	ATGCATGA	GGGCaG	GCT	caata
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B.Tau	cccaccag	gtaaggggtttg...4936...-----c	tttcaaatccac	cttctc	GTTGca	ATGCATGA	GGGCaG	GCT	caata
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L.Afr	cccaccag	gtaagggagtttg...4928...tcttttc	cttttcaaatcc	ACCTTCc	TGTTGCAAT	GCATGA	GGGCaG	GCT	caata
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id=512927 gene=ENSG00000152601 name=MBNL1 segment=chr3_152165563_152173330_1 type=IN

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B.Tau	tgtagta	atctatgggga...351...-gcatgcatgcagaagtttat	AGCTg	GCCCT	TCATct	GCATCGAT	tggtgttgaaggtccttggtatgtttcgacag	ccccatcc
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S.Sus	agtaagta	atctatggcaga...351...-gcatgcatgcagaagtttat	AGCTg	GCCCT	TCATct	GCATCGAT	tggtgttgaaggtccttggtatgtttcgacag	ccccatcc
L.Afr	agtagtgc	atctatggcaga...349...-gcatgcacgcagaagtttat	AGCTg	GCCCT	TCATct	GCATTGgt	TGGTgtGAAGGTccttggtatgtttcgacag	ccccatcc
	* * *	* * **			*****		*****	*****

id=512932 gene=ENSG00000152601 name=MBNL1 segment=chr3_152175480_152175918_1 type=AN VIEW

Figure 651:



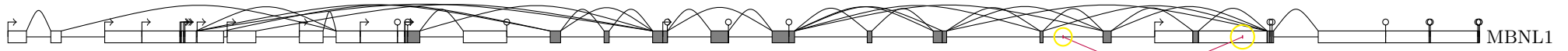
H. Sap	aagtgttg	gtaggtgccagc...	505...	aatgttgctcctgctttgcgc	TGTGATTGCATG	tcactcgctggtgatgatgt...	108...	tccctccgaaag	ttcccatg
R. Mac	aagtgttg	gtaggtgccagc...	505...	aatgttgctcctgctttgcgc	TGTGATTGCATG	tcactcgctggtgatgatgt...	108...	tccctccgaaag	ttcccatg
P. Tro	aagtgttg	gtaggtgccagc...	506...	aatgttgctcctgctttgcgc	TGTGATTGCATG	tcactcgctggtgatgatgt...	108...	tccctccgaaag	ttcccatg
P. Abe	aagtgttg	gtaggtgccagc...	503...	aatgttgctcctgctttgcgc	TGTGATTGCATG	tcactcgctggtgatgatgt...	108...	tccctccgaaag	ttcccatg
C. Jac	aagtgttg	gtaggtgccagc...	506...	aatgttgctcctgctttgcgc	TGTGATTGCATG	tcactcgctggtgatgatgt...	108...	tccctccgaaag	ttcccatg
M. Mus	aagtgttg	gtaggtgccagc...	503...	aatgttgctcctgctttgcgc	TGTGATTGCATG	tcactcgctggtgatgatgt...	108...	tccctccgaaag	ttcccatg
R. Nor	aagtgttg	gtaggtgccagc...	496...	aatgttgctcctgctttgcgc	TGTGATTGCATG	tcactcgctggtgatgatgt...	108...	tccctccgaaag	ttcccatg
C. Por	aagtgttg	gtaggtgccagc...	504...	aatgttgctcctgctttgcgc	TGTGATTGCATG	tcactcgctggtgatgatgt...	108...	tccctccgaaag	ttcccatg
O. Cun	aagtgttg	gtaggtgccagc...	502...	aatgtcctcctgctttgcgc	TGTGATTGCATG	tcactcgctggtgatgatgt...	108...	tccctccgaaag	ttcccatg
C. Fam	aagtgttg	gtaggtgccagc...	503...	aatgttgctcctgctttgcgc	TGTGATTGCATG	tcactcgctggtgatgatgt...	108...	tccctccgaaag	ttcccatg
B. Tau	aagtgttg	gtaggtgccagc...	510...	aatgttgctcctgctttgcgc	TGTGATTGCATG	tcactcgctggtgatgatgt...	108...	tccctccgaaag	ttcccatg
E. Cab	aagtgttg	gtaggtgccagc...	498...	aatgttgctcctgctttgcgc	TGTGATTGCATG	tcactcgctggtgatgatgt...	108...	tccctccgaaag	ttcccatg
S. Sus	aagtgttg	gtaggtgccagc...	504...	aatgttgctcctgctttgcgc	TGTGATTGCATG	tcactcgctggtgatgatgt...	108...	tccctccgaaag	ttcccatg
L. Afr	aagtgttg	gtaggtgccagc...	521...	aatgttgctcctgctttgcgc	TGTGATTGCATG	tcactcgctggtgatgatgt...	108...	tccctccgaaag	ttcccatg
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id=512929 gene=ENSG00000152601 name=MBNL1 segment=chr3.152173367.152174055.1 type=IN

H. Sap	gagagaaa	gaactatactaa...	366...	aatgtgcttggttttactat	TATGTAATCACA	acttactttctgctttagt--...	103...	gccctaataaaa	cttctctt
R. Mac	aaaagaga	gaactatactaa...	365...	aatgtgcttggttttactat	TATGTAATCACA	acttactttctgctttagt--...	103...	gccctaataaaa	cttctctt
P. Tro	gagagaaa	gaactatactaa...	365...	aatgtgcttggttttactat	TATGTAATCACA	acttactttctgctttagt--...	103...	gccctaataaaa	cttctctt
P. Abe	gagagaaa	caactatactaa...	366...	aatgtgcttggttttactat	TATGTAATCACA	acttactttctgctttagt--...	103...	gccctaataaaa	cttctctt
C. Jac	gagagaaa	gaactatactaa...	366...	aatgtgcttggttttactat	TATGTAATCACA	acttactttctgctttagt--...	103...	gccctaataaaa	cttctctt
M. Mus	gagagaaa	gaactatgctaa...	368...	agtgagcttggttttactat	TATGTAATCACA	acttactttctgctttagt--...	103...	gccctaataaaa	cttctctt
R. Nor	gagagaaa	gaactatgctaa...	348...	aatgtgctcggctttactat	TATGTAATCACA	acttacttt--gctttagttg...	101...	gccctaataaaa	cttctctt
C. Por	aaaagaaa	gaactatactaa...	371...	aacgtgcttggttttactat	TATGTAATCACA	acttactttctgctttagt--...	103...	gccctaataaaa	cttctctt
O. Cun	aagagaaa	gaactatactaa...	371...	aatgtgcttggttttactat	TATGTAATCACA	acttactttctgctttagt--...	103...	gccctaataaaa	cttctctt
C. Fam	gagagaaa	gaactatactaa...	369...	gatgtgcttggttttactat	TATGTAATCACA	acttactttctgctttagt--...	103...	gccctaataaaa	cttctctt
B. Tau	gagagaaa	gaactatactaa...	382...	gatgtgcttggttttactat	TATGTAATCACA	acttactttctgctttagt--...	103...	gccctaataaaa	cttctctt
E. Cab	gagagaaa	gaactatactaa...	368...	gacgtgcttggttttactat	TATGTAATCACA	acttactttctgctttagt--...	102...	gccctaataaaa	cttctctt
S. Sus	caaaaaaa	gaactatactaa...	376...	gatgtgcttggttttactat	TATGTAATCACA	acttactttctgctttagt--...	103...	gccctaataaaa	cttctctt
L. Afr	gagagaaa	gaactatactaa...	374...	ggtgtgcttggttttactat	TATGTAATCACA	acttactttctgctttagt--...	103...	gccctaataaaa	cttctctt
	* * * *	***** * **		* ** * *	*****	*****		*****	*****

id=512942 gene=ENSG00000152601 name=MBNL1 segment=chr3.152183008.152183552.1 type=EN VIEW

Figure 652:



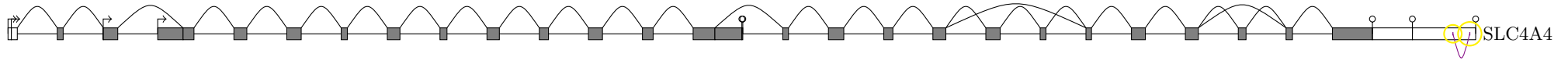
H. Sap	aagtgttg	gtaggtgccagc...183...c t t t a g t c a c c t t t g g t g g a	TTTTG	TTGG	CTATG	agttctgggtgtgtaaaaaa...426...tcctccgaaag	ttcccatg
R. Mac	aagtgttg	gtaggtgccagc...183...c t t t a g t c a c c t t t g g t g g a	TTTTG	TTGG	CTATG	agttctgggtgtgtaaaaaa...426...tcctccgaaag	ttcccatg
P. Tro	aagtgttg	gtaggtgccagc...183...c t t t a g t c a c c t t t g g t g g a	TTTTG	TTGG	CTATG	agttctgggtgtgtaaaaaa...427...tcctccgaaag	ttcccatg
P. Abe	aagtgttg	gtaggtgccagc...183...c t t t a g t c a c c t t t g g t g g a	TTTTG	TTGG	CTATG	agttctgggtgtgtaaaaaa...424...tcctccgaaag	ttcccatg
C. Jac	aagtgttg	gtaggtgccagc...183...c t t t a g t c a c c t t t g g t g g a	TTTTG	TTGG	CTATG	agttctgggtgtataaaaaa...427...tcctccgaaag	ttcccatg
R. Nor	aagtgttg	gtaggtgccagc...181...c t t t a g t c a c t a t t a g t g g a	TTTTG	TTGG	CTATG	agttctgggtatataaaaaa...419...tcctccgaaag	ttcccatg
C. Por	aagtgttg	gtaggtgccagc...183...c t t t a g t c a c c t t t g g t g g a	TTTTG	TTGG	CTATG	agttctgggtataaaaaa...425...tcctccgaaag	ttcccatg
O. Cun	aagtgttg	gtaggtgccagc...182...c t t t t g t c a c c t t t g g t g g a	TTTTG	TTGG	CTATG	agttctgggttataaaaaa...424...tcctccgaaag	ttcccatg
C. Fam	aagtgttg	gtaggtgccagc...181...c t t t a g t c a c c t t t g g t g g a	TTTTG	TTGG	CTATG	agttctgggtgtgtaaaaaa...426...tcctccgaaag	ttcccatg
B. Tau	aagtgttg	gtaggtgccagc...181...c t t t a g t c a c c t t t g g t g g a	TTTTG	TTGG	CTATG	agttctgggtgtgtaaaaaa...433...tcctccgaaag	ttcccatg
E. Cab	aagtgttg	gtaggtgccagc...180...c t t c a g t c a c c t t t g g t g g a	TTTTG	TTGG	CTATG	agttctgggtgtgtaaaaaa...422...tcctccgaaag	ttcccatg
S. Sus	aagtgttg	gtaggtgccagc...181...c t t t a g t c a c c t t t g g t g g a	TTTTG	TTGG	CTATG	agttctgggtgtgttttaaa...427...tcctccgaaag	ttcccatg
L. Afr	aagtgttg	gtaggtgccagc...183...c t t t t g t c a c c t t t g g t g g a	TTTTG	TTGG	CTATG	agttctgggtgtgttaaaaa...442...tcctccgaaag	ttcccatg
	*****	*****	* * ****	** *****	*****	* * * *****	*****

id=512929 gene=ENSG00000152601 name=MBNL1 segment=chr3_152173367_152174055_1 type=IN

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R. Mac	gaaaaatg	gtatgagaagct...744...----ggcgggggtgtgtgtgtgtg	TGTAG	CCAACAAAAA	gggcttc-tttcaa-tactgct...	255...tttattgctag	ataccat
P. Tro	gaaaaatg	gtatgagaagct...731...----tgtgtgtgtgtgtgtgtgtg	TGTAG	CCAACAAAAA	gggcttc-tttcaattactgc...	251...tttattgctag	ataccat
P. Abe	gaaaaatg	gtatgagaagct...759...----tgtgtgtgtgtgtgtgtgtg	TGTAG	CCAACAAAAA	gggcttc-tttcaattactgc...	250...tttattgctag	ataccat
C. Jac	gaaaaatg	gtatgagaagct...727...----tgtgtgtgtgtgtgtgtgtg	TGTAG	CCAACAAAAA	gggcttc-tttcaattactgc...	258...tttattgctag	ataccat
R. Nor	gaacaatg	gtatgagagct...710...----tatgcgtgcgagtgctgtg	TGTAG	CCAACAAAAA	gggcttc-ttttaacaactgc...	258...tttattgctag	ataccat
C. Por	gaaaaatg	gtatgagaagct...723...----accaagggggtgtgctgtg	TGTAG	CCAACAAAAA	gggcttc-tttcaattactgc...	249...tttattgctag	ataccat
O. Cun	gaaaaatg	gtatgagaagct...729...----caggtgtgtgtgtgtgtgtg	TGTAG	CCAACAAAAA	ggacttc-tttcaattactgc...	255...cttattgctag	ataccat
C. Fam	gaaaaatg	gtatgagaagct...757...----accacaggtgtgtgtgtgtg	TGTAG	CCAACAAAAA	gggcttc-tttcaattactgc...	266...tttattgctag	ataccat
B. Tau	gaaaaatg	gtatgagaagct...698...tgaaacacagggcgcgtgtg	---TGTAG	CCAACAAAAA	gggcttc-tttcaattactgc...	257...tttattgctag	ataccat
E. Cab	gaaaaatg	gtatgagaagct...742...----accacagcgtgtgtgtgtg	TGTAG	CCAACAAAAA	gggcttc-tttcgattactgc...	257...tttattgctag	ataccat
S. Sus	gaaaaatg	gtatgagaagct...749...----tgaaacacaggtgtgtgtg	TGTAG	CCAACAAAAA	gggcttc-tttcaattactgc...	256...tttattgctag	ataccat
L. Afr	gaagaatg	gtatgagaagct...747...----tgaagcacaggtgtgtgtg	TGTAG	CCAACAAAAA	gggcttc-tttcaattactgc...	277...tttattgctag	ataccat
	*** **	*****	*	***	*****	** ** * **	***** **

id=512934 gene=ENSG00000152601 name=MBNL1 segment=chr3_152175983_152177059_1 type=AN VIEW

Figure 653: CS=3.9



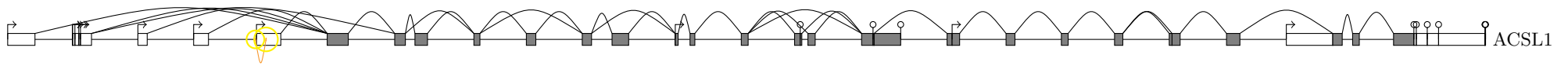
H. Sap	actccac	tcattgttatgt--...2027...cagaatcaat	acgcactttc	AGATATt	CCTATTTTT	at	TCTCTTAA	gtcctttattaactttggaga...253...-tttatgcattta	tgactgtc
R. Mac	attccac	tcattgttatgt--...1879...cagaatcaat	acgcactttc	AGATATt	CCTATTTTT	at	TCTCTTAA	gtcctttattaactttggaga...252...-tttatgcattta	tgagtgtc
P. Tro	actccac	tcattgttatgt--...2026...cagaatcaat	acgcactttc	AGATATt	CCTATTTTT	at	TCTCTTAA	gtcctttattaactttggaga...253...-tttatgcattta	tgagtgtc
P. Abe	actccac	tcattgttatgt--...2024...cagaatcaat	acgcactttc	AGATATt	CCTATTTTT	at	TCTCTTAA	gtcctttattaactttggaga...252...-tttatgcattta	tgagtgtc
C. Jac	attaccat	tcggtgtgtgt--...2023...cagaatcaat	acgcactttc	AGATATt	CCTATTTTT	at	TCTCTTAA	gtcctttattaactttggaga...252...-tttatgcattta	tgagtgtc
M. Mus	actccac	t--ttcttacagga...1875...cacaatcagt	acgcactttc	AGGTAg	TCTTATTTTT	at	TCTCTTAA	gtcctttattaactttggaga...249...-tttatgcattta	tgagtgtc
R. Nor	actccac	c--ttcttacagga...1815...cacaatcagt	acgcactttc	AGGTAg	TCTTATTTTT	at	TCTCTTAA	gtcctttattaactttggaga...251...-tttatgcattta	tgagtgtc
O. Cun	aatcccat	t-acggttatagt--...1982...tagaatcaat	acgcactttc	AGATAg	TCTTATTTTT	at	TCTCTTAA	gtcctttattaactttggaga...249...-tttatgcattta	tgagtgtc
C. Fam	actcctac	tcattcttatcat--...2075...cagaattaat	acgcactttc	AGATATt	CCTATTTTT	at	TCTCTTAA	gtcctttattaactttggaga...252...-tttatgcattta	tgagtgtc
F. Cat	actccac	tcattctgtgt--...2083...cagaatcaat	acgcactttc	AGATATt	CCTATTTTT	at	TCTCTTAA	gtcctttattaactttggaga...251...-tttatgcattta	tgagtgtc
B. Tau	actccac	tcattcttatcat--...2190...cagaatcaat	acgcactttc	AGATATt	CCTATTTTT	at	TCTCTTAA	gtcctttattaactttggaga...251...-tttatgcattta	tgagtgtc
E. Cab	actctcac	tcattcttatcat--...2237...cagaatcaat	acgcactttc	AGATATt	CCTATTTTT	at	TCTCTTAA	gtcctttattaactttggaga...252...-tttatgcattta	tgagtgtc
S. Sus	actcccat	tcattcttatcat--...1954...cagaatcagt	acgcactttc	AAATATt	CCTATTTTT	at	TCTCTTAA	gtcctttattaactttggaga...248...-tttatgcatttt	tgagtgtc
O. Avi	actccac	tcattcttatcat--...2200...mnnnatcaat	acgcactttc	AGATATt	CCTATTTTT	at	TCTCTTAA	gtcctttattaactttggaga...251...-tttatgcattta	tgagtgtc
L. Afr	actctcat	tcattcttatcat--...2436...cagaatcaat	acgcactttc	AGATATt	CCTATTTTT	at	TCTCTTAA	gtcctttattaacttttagaga...251...-tttatgcattta	tgagtgtc
	* * *	**		** * *	*****	**	*****	*****	** **

id=413538 gene=ENSG0000080493 name=SLC4A4 segment=chr4_72435435_72437804.1 type=E3

H. Sap	actccac	tcattgttatgt--...2250...ctattgtgact	tttatggaa	TAAAGAGAtg	AAGAAga	TGAGATATTT	tagcatttatattttcaaa...29...-tttatgcattta	tgactgtc
R. Mac	attccac	tcattgttatgt--...2102...ctattgtgact	tttatggaa	TAAAGAGAtg	AAGAAga	TGAGATATTT	tagcatttatattttcaaa...28...-tttatgcattta	tgagtgtc
P. Tro	actccac	tcattgttatgt--...2249...ctattgtgact	tttatggaa	TAAAGAGAtg	AAGAAga	TGAGATATTT	tagcatttatattttcaaa...29...-tttatgcattta	tgagtgtc
P. Abe	actccac	tcattgttatgt--...2247...ctattgtgact	tttatggaa	TAAAGAGAtg	AAGAAga	TGAGATATTT	tagcatttatattttcaaa...28...-tttatgcattta	tgagtgtc
C. Jac	attaccat	tcggtgtgtgt--...2246...ctattgtgact	tttatggaa	TAAAGAGAtg	AAGAAga	TGAGATATTT	tagcatttatattttcaaa...28...-tttatgcattta	tgagtgtc
M. Mus	actccac	t--ttcttacagga...2095...ctattgtgact	tttatggaa	TAAAGAGAtg	AAGAAga	TGAGATATTT	tagcatttatattttcaaa...28...-tttatgcattta	tgagtgtc
R. Nor	actccac	c--ttcttacagga...2037...ctattgtgact	tttatggaa	TAAAGAGAtg	AAGAAga	TGAGATATTT	tagcatttatattttcaaa...28...-tttatgcattta	tgagtgtc
O. Cun	aatcccat	t-acggttatagt--...2202...ctattgtgact	tttatggaa	TAAAGAGAtg	AAGAAga	TGAGATATTT	tagcatttatattttcaaa...28...-tttatgcattta	tgagtgtc
C. Fam	actcctac	tcattcttatcat--...2298...ctattgtgact	tttatggaa	TAAAGAGAtg	AAGAAga	TGAGATATTT	tagcatttatattttcaaa...28...-tttatgcattta	tgagtgtc
F. Cat	actccac	tcattctgtgt--...2305...ctattgtgact	tttatggaa	TAAAGAGAtg	AAGAAga	TGAGATATTT	tagcatttatattttcaaa...28...-tttatgcattta	tgagtgtc
B. Tau	actccac	tcattcttatcat--...2413...ctattgtgact	tttatggaa	TAAAGAGAtg	AAGAAga	TGAGATATTT	tagcatttatattttcaaa...27...-tttatgcattta	tgagtgtc
E. Cab	actcctac	tcattcttatcat--...2460...ctattgtgact	tttatggaa	TAAAGAGAtg	AAGAAga	TGAGATATTT	tagcatttatattttcaaa...28...-tttatgcattta	tgagtgtc
S. Sus	actcccat	tcattcttatcat--...2174...ctattgtgact	tttatggaa	TAAAGAGAtg	AAGAAga	TGAGATATTT	tagcatttatattttcaaa...27...-tttatgcatttt	tgagtgtc
O. Avi	actccac	tcattcttatcat--...2422...ctattgtgact	tttatggaa	TAAAGAGAtg	AAGAAga	TGAGATATTT	tagcatttatattttcaaa...28...-tttatgcattta	tgagtgtc
L. Afr	actctcat	tcattcttatcat--...2658...ctattgtgact	tttatggaa	TAAAGAGAtg	AAGAAga	TGAGATATTT	tagcatttatattttcaaa...28...-tttatgcattta	tgagtgtc
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id=413538 gene=ENSG0000080493 name=SLC4A4 segment=chr4_72435435_72437804.1 type=E3 VIEW

Figure 654:



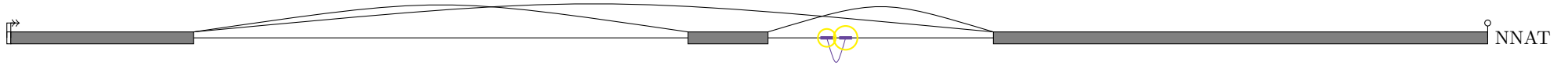
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R. Mac	atgttaat	gtaagtaaaagt...2432...-----	acactcactgatgcctgtcc-----	CTGCCCATGGGTGGAGca	GTGGGGT	Gactctgc
P. Tro	atgttaat	gtaagtaaaagt...2444...-----	acactcactgatgcctgtcc-----	CTGCCCATGGGTGGAGca	GTGGGGT	Gactttgc
P. Abe	atgttaat	gtaagtaaaagt...2456...-----	acactcactgatgcctgtcc-----	CTGCCCATGGGTGGAGca	GTGGGGT	Gactttgc
C. Jac	atgttaat	gtaagtaaaagt...2367...-----	gcagcactgatgcctgtcc-----	CTGCCCATGGGTGGAGca	GTGGGGT	Gactcggc
M. Mus	atgctact	gtgagtaaaaga...2254...-----	acactcactgatgctgtcc-----	CTGCCCATGGGTGGAGcg	GTGGGGT	Gactctac
R. Nor	atgctact	gtaagtagaaga...2533...gcagca	acactcactgatgc-----	TGCTccCTGCCCATGGGTGGAGcg	GTGGGGT	Gactttcc
C. Por	atgcta	atgtaaaat...2304...--gaaca	cactcactggtgtg-----	GTCCCTGCCCATGGGTGGAGCAGT	ggGGT	Gactctgc
O. Cun	atgctt	gtgtaataatc...2533...gcagcca	cactcactgatgc-----	CTGTccCTGCCCATGGGTGGAGca	GTGGGGT	Gactctgc
C. Fam	atgctg	atgtaacacat...2754...-----	agtgacactgaagcctgtcc-----	CTGCCCATGGGTGGAGca	GTGGGGT	Gactctgc
F. Cat	atgctg	atgtaatacaat...2469...-ctggc	actgagcactGGCTGATgCCTGTCC	CTGCCCATGGGTGGAGca	GTGGGGT	Gactctgc
B. Tau	atgcta	atgtaatactgt...2877...-----	acactaactgatgcctgtcc-----	CTGCCCATGGGTGGAGca	GTGGGGT	Gactctgc
L. Afr	atgttaa	tgtagtgtcagt...2611...-----	acactgactgatgcctgtcc-----	CTGCCCATGGGTggagtgggtggggt		gactctgc
	*** *	** ***	* ** *	*****	*****	*** *

id=485034 gene=ENSG00000151726 name=ACSL1 segment=chr4.185726943-185729445-1 type=IN

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R. Mac	agtggggt	gactctgcgct---.42...agtca	agtgtggattttgtcTGCTag	TTACCTTTaGCCCAg	TGGGCAG	-----cagcgtggg	ctcggcatgt-----	.128...--gtggc	acagatg	gtgagtgg		
P. Tro	agtggggt	gactttgctgct---.42...agtca	agtgtggattttgtcTGCTag	TTACCTTTaGCCCAg	TGGGCAG	-----cagcgtggg	ctcggcatgt-----	.128...--gtggc	acagatg	gtgagtgg		
P. Abe	agtggggt	gactttgctgct---.42...agtca	agtgtggattttgtcTGCTag	TTACCTTTaGCCCAg	TGGGCAG	-----cagcgtggg	ctcggcatgt-----	.128...--gtggc	acagatg	gtgagtgg		
C. Jac	agtggggt	gactcggctgct---.42...agtca	agtgtggattttgtcTGCTag	TTACCTTTaGCCCAg	TGGGCAG	-----cagcgtggg	ctcggcatgt-----	.128...--gtggc	acagatg	gtgagtgg		
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C. Por	agtggggt	gactctgctccc---.42...agtca	agtgtggattttgtcTGCTa	GTTGcCTTTgGCCCAg	TGGGCAG	caGGGT-----	aggactcag	catgtgactaa	...124...--gtggc	acagatg	gtgagtgg	
O. Cun	agtggggt	gactctgctgcc---.41...agtca	agtgtggattttgtcTGCTag	TTACCTTTaGCCCAg	TGGGCAG	ccGCAG-----	agcctcgg	catgtgactaa	...114...--gtggc	acagatg	gtgagtgg	
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B. Tau	agtggggt	ga--ctgctcccag...40...agtca	cagtgtggattttgtcTGCTag	TTACCTTTaGCCCAg	TGGGCAG	-----cagcacagg	agtcggcatgt	-----	.130...--gtggc	acagacag	gtgagtgc	
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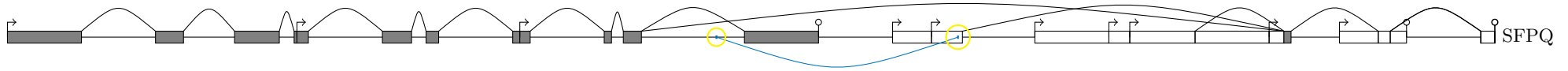
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C. Por	gaagtgag	gtatacctaagttgtgggtccaatcagcttgcgccaatgcagctc	TCAGca	CAGTTGGA	aaaagctccagctgccctgac...142...ctctcactgcag	gtgttcag
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C. Fam	gaagtgag	gtatacctaagttgtgggtccaatcagcttgcgccaatgcagctc	TCAGca	CAGTTGGA	aaaagctccagctgccctgac...131...ctcttgcgtgag	gtgttcag
F. Cat	gaagtgag	gtatacctaagttgtgggtccaatcagcttgcgccaatgcagctc	TCAGca	CAGTTGGA	aaaagctccagctgccctgac...135...ctctcaccgcag	gtgttcag
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R. Mac	gaagtgag	gtatacctaagt...32...ctcagcacagttggaaaagc	TCCAGCTG	ccCTGA	ctcgtggacaagctgcgccc...118...ttctcgcgcag	gtgttcag
P. Tro	gaagtgag	gtatacctaagt...32...ctcagcacagttggaaaagc	TCCAGCTG	ccCTGA	ctcgtggacaagctgcgccc...118...ttctcgtcgcag	gtgttcag
P. Abe	gaagtgag	gtatacctaagt...32...ctcagcacagttggaaaagc	TCCAGCTG	ccCTGA	ctcgtggacaagctgcgccc...118...ttctcgcgcag	gtgttcag
C. Jac	gaagtgag	gtatacctaagt...32...ctcagcacagttggaaaagc	TCCAGCTG	ccCTGA	ctcgtggacaagctgcgccc...118...ttcttgccacag	gtgttcag
M. Mus	gaagtgag	gtatacctaagt...32...ctcagcacagttggaaaagc	TCCAGCTG	ccCTGA	ctcgtggacaagctgcgccc...138...ctctcaccgcag	gtgttcag
R. Nor	gaagtgag	gtatacctaagt...32...ctcagcacagttggaaaagc	TCCAGCTG	ccCTGA	ctcgtggacaagctgcgccc...140...ctctcaccgcag	gtgttcag
C. Por	gaagtgag	gtatacctaagt...32...ctcagcacagttggaaaagc	TCCAGCTG	ccCTGA	ctcgtggacaagctgcaccc...123...ctctcactgcag	gtgttcag
O. Cun	gaagtgag	gtatacctaagt...32...ctcagcacagttggaaaagc	TCCAGCTG	ccCTGA	ctcgtggacaagctgcgccc...119...gtctctccgcag	gtgttcag
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F. Cat	gaagtgag	gtatacctaagt...32...ctcagcacagttggaaaagc	TCCAGCTG	ccCTGA	ctcgtggacaagctgcgccc...116...ctctcaccgcag	gtgttcag
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E. Cab	gaagtgag	gtatacctaagt...32...ctcagcacagttggaaaagc	TCCAGCTG	ccCTGA	ctcgtggacaagctgcgccc...113...ctctcaccgcag	gtgttcag
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id=658621 gene=ENSG0000053438 name=NNAT segment=chr20.36150841.36151068.1 type=IN VIEW

Figure 656:



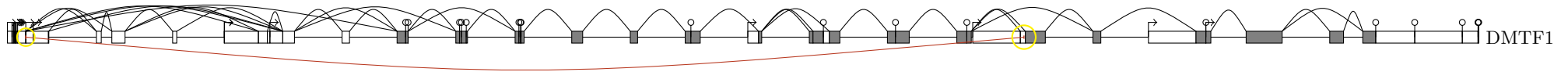
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P. Tro	gtgacatg	gtaatgtatcct...2174...acaggtgatgagaatggctCAAGTGGGAacATAC	cacaaggcattgtattaccgt...157...ctgttccaatag	cgtagtga
P. Abe	gtgacatg	gtaatgtatcct...2178...acaggtgatgagaatggctCAAGTGGGAacATAC	cacaaggcattgtattaccgt...157...ctgttccaatag	cgtagtga
C. Jac	gtgacatg	gtaatgtatcct...2169...acaggtgatgagaatggctCAAGTGGGAacATAC	cacaaggcattgtattaccgt...157...ctgttccaatag	cgtagtga
M. Mus	gcgacatg	gtaatgtatcct...2072...acaggtgatgagaatggctCAAGTGGGAacATAC	cacaaggcattgtattaccgt...157...ctgttccaatag	cgtagtga
R. Nor	gcgacatg	gtaatgtatcct...2044...acaggtgatgagaatggctCAAGTGGGAacATAC	cacaaggcattgtattaccgt...157...ctgttccaatag	cgtagtga
C. Por	gtgacatg	gtaatgtatcct...2191...acaggtgatgagaatggctCAAGTGGGAacATAC	cagaagcattgtattaccgt...156...ctgttccaatag	cgtagtga
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L. Afr	gcgacatg	gtaatgtatcct...2301...acaggtgatgagaatggctCAAGTGGGAacATAC	cacaaggcattgtattaccgt...157...ctgttccaatag	cgtagtga
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P. Tro	tcttgggc	aagccactaagt...134...gacattaggaccggatgtaGTATTCTGCTTG	ctccaagatttctcattgccgactgcatacag	gtaggtaa
P. Abe	tcttgggc	aagccactaagt...134...gacattaggaccggatgtaGTATTCTGCTTG	ctccaagatttctcattgccgactgcatacag	gtaggtaa
C. Jac	tcttgggc	aagccacttagt...134...gacattaggaccggatgtaGTATTCTGCTTG	ctccaagatttctcattgccgactgcatacag	gtaggtaa
M. Mus	gcttggac	aagccataaagt...134...gacattaggaccggatgtaGTATTCTGCTTG	ctccaagatttctcattgccgactgcatacag	gtaggtaa
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C. Por	gcttgggc	aagccaccaagt...134...gacattaggaccggatgtaGTATTCTGCTTG	ctccaagatttctcattgccgactgcatacag	gtaggtaa
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Figure 657:



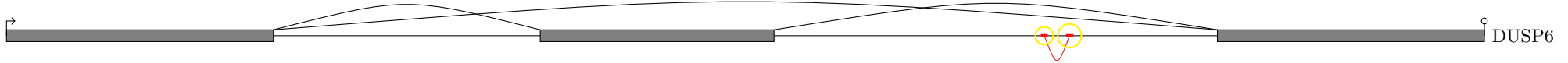
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P. Tro	ctgcagcc	actctcgcccgt...40...ctggttcttccaaagtgcc	GGACccAAAAcAGG	Aagtaagt
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P. Abe	-ctgcttag	atggtggtctgtcg--gagaatcaatg	TTCTTTTGTCT	acccatctcccttcag	tcttaata
C. Jac	-ctgcttag	atggtggtctgtcg--gagaatcaatg	TTCTTTTGTCT	acccatctcccttcag	tcttaata
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Figure 658:



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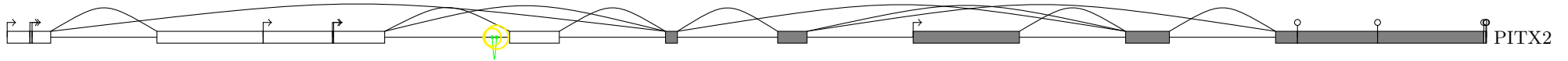
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id=324580 gene=ENSG00000139318 name=DUSP6 segment=chr12.89743339.89744364_-1 type=IN VIEW

Figure 659:



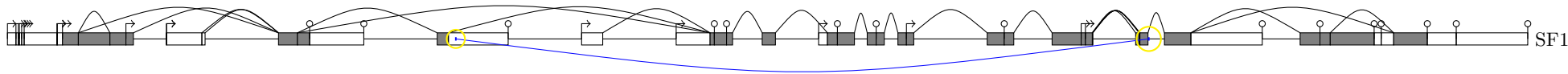
H. Sap	ggtagccg	gtaagtggaggc...2261...taaaatcccatctgtgttac	TTCATATCGAGTT	agtagaaagctgtgataatg...51...atcttactgcag	aatcacta
R. Mac	ggtagccg	gtaagtggaggc...2267...taaaatcccatctgtgttac	TTCATATCGAGTT	agtagaaagctgtgataatg...51...atcttactgcag	aatcacta
P. Tro	ggtagccg	gtaagtggaggc...2268...taaaatcccatctgtgttac	TTCATATCGAGTT	agtagaaagctgtgataatg...51...atcttactgcag	aatcacta
P. Abe	ggtagccg	gtaagtggaggc...2252...taaaatcccatctgtgttac	TTCATATCGAGTT	agtagaaagctgtgataatg...51...atcttactgcag	aatcacta
C. Jac	ggtagccg	gtaagtggaggc...2247...taaaatcccatctgtgttac	TTCATATCGAGTT	agtagaaagctgtgataatg...51...atcttactgcag	aatcacta
M. Mus	ggtagccg	gtaagtggaggc...2328...taaaatcccatctgtgttac	TTCATATCGAGTT	agtagaaagctgtgataatg...51...atcttactgcag	aatcgcta
R. Nor	ggtagccg	gtaagtggaggc...2272...taaaatcccatctgtgttac	TTCATATCGAGTT	agtagaaagctgtgataatg...51...atcttactgcag	aatcgcta
C. Por	ggtagctg	gtaagtggaggc...2164...taaaatcccatctgtgttac	TTCATATCGAGTT	agtagaaagctgtgataatg...51...atcttactgcag	aatcacta
O. Cun	ggtagctg	gtaagtggaggc...2302...taaaatcccatctgtgttac	TTCATATCGAGTT	agtagaaagctgtgataatg...51...atcttactgcag	aatcacta
B. Tau	ggtagcgg	gtaagtggaggc...2350...taaaatcccatctgtgttac	TTCATATCGAGTT	agtagaaagctgtgataatg...51...atcttactgcag	aatcacta
E. Cab	gggagccg	gtaagtggaggc...2246...taaaatcccatctgtgttac	TTCATATCGAGTT	agtagaaagctgtgataatg...51...atcttactgcag	aatcacta
O. Avi	nnnnnnnn	gtaagtggaggc...2349...taaaatcccatctgtgttac	TTCATATCGAGTT	agtagaaagctgtgataatg...51...atcttactgcag	aatcacta
L. Afr	ggtagccg	gtaagtggaggc...2308...taaaatcccatctgtgttac	TTCATATCGAGTT	agtagagagctgtgataatg...51...atcttactgcag	aatcacta
		*****		*****	**** **

id=352592 gene=ENSG00000164093 name=PITX2 segment=chr4_111555548_111557936_-1 type=I5

H. Sap	ggtagccg	gtaagtggaggc...2281...ttcatatcgagttagtagaaa	AGCTGTGATA	TGAA	ttttgtaatatctcacgaac...29...atcttactgcag	aatcacta
R. Mac	ggtagccg	gtaagtggaggc...2287...ttcatatcgagttagtagaaa	AGCTGTGATA	TGAA	ttttgtaatatctcacgaac...29...atcttactgcag	aatcacta
P. Tro	ggtagccg	gtaagtggaggc...2288...ttcatatcgagttagtagaaa	AGCTGTGATA	TGAA	ttttgtaatatctcacgaac...29...atcttactgcag	aatcacta
P. Abe	ggtagccg	gtaagtggaggc...2272...ttcatatcgagttagtagaaa	AGCTGTGATA	TGAA	ttttgtaatatctcacgaac...29...atcttactgcag	aatcacta
C. Jac	ggtagccg	gtaagtggaggc...2267...ttcatatcgagttagtagaaa	AGCTGTGATA	TGAA	ttttgtaatatctcacgaac...29...atcttactgcag	aatcacta
M. Mus	ggtagccg	gtaagtggaggc...2348...ttcatatcgagttagtagaaa	AGCTGTGATA	TGAA	ttttgtaatatctcccgaac...29...atcttactgcag	aatcgcta
R. Nor	ggtagccg	gtaagtggaggc...2292...ttcatatcgagttagtagaaa	AGCTGTGATA	TGAA	ttttgtaatatctcccgaac...29...atcttactgcag	aatcgcta
C. Por	ggtagctg	gtaagtggaggc...2184...ttcatatcgagttagtagaaa	AGCTGTGATA	TGAA	ttttgtaatatctcacgaac...29...atcttactgcag	aatcacta
O. Cun	ggtagctg	gtaagtggaggc...2322...ttcatatcgagttagtagaaa	AGCTGTGATA	TGAA	ttttgtaatatctcacgaac...29...atcttactgcag	aatcacta
B. Tau	ggtagcgg	gtaagtggaggc...2370...ttcatatcgagttagtagaaa	AGCTGTGATA	TGAA	ttttgtaatatctcacgaac...29...atcttactgcag	aatcacta
E. Cab	gggagccg	gtaagtggaggc...2266...ttcatatcgagttagtagaaa	AGCTGTGATA	TGAA	ttttgtaatatctcacgaac...29...atcttactgcag	aatcacta
O. Avi	nnnnnnnn	gtaagtggaggc...2369...ttcatatcgagttagtagaaa	AGCTGTGATA	TGAA	ttttgtaatatctcacgaac...29...atcttactgcag	aatcacta
L. Afr	ggtagccg	gtaagtggaggc...2328...ttcatatcgagttagtagaaa	AGCTGTGATA	TGAA	ttttgtaatatctcatgaac...29...atcttactgcag	aatcacta
		*****		*****	**** **	**** **

id=352592 gene=ENSG00000164093 name=PITX2 segment=chr4_111555548_111557936_-1 type=I5 VIEW

Figure 660:



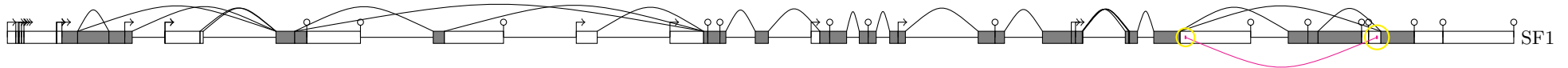
H.Sap	gaggacag	gttgggaaacagttttaaccagctgacagtaacgctt- TTACC-TTTTCT	caatac-gtttactggtggc...326...tgagcatcactg	aacttgag
R.Mac	gaggacag	gttgggaaacagttttaaccagctgacagtaacgctt- TTACC-TTTTCT	caatac-gtttactggtggc...324...tgagcatcactg	aacttgag
P.Tro	gaggacag	gttgggaaacagttttaaccagctgacagtaacgctt- TTACC-TTTTCT	caatac-gtttactggtggc...326...tgagcatcactg	aacttgag
P.Abe	gaggacag	gttgggaaacagttttaaccagctgacagtaacgctt- TTACC-TTTTCT	caatac-gtttactggtggc...325...tgagcatcactg	aacttgag
C.Jac	gaggacag	gttgggaaacagttttaaccagctgacagtaacgctt- TTACC-TTTTCT	caatac-gtttactggtggc...320...tgagcatcactg	aacttgag
M.Mus	gaggacag	gttgggaaacagttttaaccagctgacagtaacgctt- TTACCTTtTTTCT	caatag-ttttactggtgg-...294...taaccatcactg	aatttaag
R.Nor	gaggacag	gttgggaaacagttttaaccagctgacagtaacgctt- TTACC-TTTTCT	caatag-ttttactggtggc...317...taaccaccactg	aatttaag
C.Por	gaggacag	gttgggaaacagttttaaccagctgacagtaacgctt- TTACC-TTTTCT	caatac-tttaactggtggc...318...tgaacatcactg	aatttgag
O.Cun	gaggacag	gttgggaaacagttttaaccagctgac- AGTAACGCTTTACC	caatac-gtttactggtggc...301...tgggcatcgctg	agttcgag
C.Fam	gaggacag	gttgggaaacagttttaaccagctgacagtaacgctt- TTACC-TTTTCT	caatac-gtttactggtggc...328...tgagcatcactg	aatttgag
F.Cat	gaggacag	gttgggaaacagttttaaccagctgacagtaacgctt- TTACC-TTTTCT	caatac-gtttactggtggc...328...tgagcatcactg	agtttgag
B.Tau	gaggacag	gttgggaaacagttttaaccagctgacagtaacgctt- TTACC-TTTTCT	caatac-gtttactggtggc...325...tgagcatcactg	aatttgag
S.Sus	gaggacag	gttgggaaacagttttaaccagctgacagtaac- GCTTTTACC	caatac-gtttactggtggc...321...tgagcatcgctg	agtctgag
L.Afr	gaggacag	gttgggaaacagttttaaccagctgacagtaacgctt- TTACC-TTTTCT	caatac-gtttactggtggc...322...tgagcatcactg	aatttgag
*****	*****	***** * * ***** * ** ***** * ** * ** *		**

id=532808 gene=ENSG00000168066 name=SF1 segment=chr11.64540495.64540901_-1 type=AN

H.Sap	aGGAAAAG	GTAA	-----	tggctgtctgctggctgtgg--...76...acctgtccacag	gatatgatg
R.Mac	aGGAAAAG	GTAA	-----	tggctgtctgctgactgtgg--...76...acctaccgcag	gatatgatg
P.Tro	aGGAAAAG	GTAA	-----	tggctgtctgctggctgtgg--...76...acctgtccacag	gatatgatg
P.Abe	aGGAAAAG	GTAA	-----	tggctgtctgctggctgtgg--...78...acctaccgcag	gatatgatg
C.Jac	aGGAAAAG	GTAA	-----	tggctgtctgctggctgtgg--...76...acctaccgcag	gatatgatg
M.Mus	aGGAAAAG	GTAA	-----	tgctgcttactcttggga...74...tactgctgcag	gatatgatg
R.Nor	aGGAAAAG	GTAA	-----	tgctgc-tattcacttggga...79...tattgctgcag	gatatgatg
C.Por	aGGAAAAG	GTAA	----	ctgttgcttgtgtccaca-----...58...ccctcactgcag	gatatgatg
O.Cun	aGGAAAAG	GTAA	tGGCGTcTGCT	tgcttcgagtcacatgggc...53...accgcactgcag	gatatgatg
C.Fam	aGGAAAAG	GTAA	---	tgacgcctgtatcagctca-----...80...accacactgcag	gatatgatg
F.Cat	aGGAAAAG	GTAA	---	cacagcctgtcccctgctcc-----...70...gcctgctgcag	gatatgatg
B.Tau	aGGAAAAG	GTAA	---	cagcctggttggcttct-----...83...gccttctgcag	gatatgatg
S.Sus	aGGAAAAG	GTAA	tgGAGC	ctgggggtctgcgcagcga---...86...acctaccgcag	gatatgatg
L.Afr	aGGAAAAG	GTAA	---	tggagatgatgctgtccct-----...89...ctctcctgcag	gatatgatg
*****	*****	****		*****	*****

id=532840 gene=ENSG00000168066 name=SF1 segment=chr11.64534552.64534663_-1 type=IN VIEW

Figure 661: CS=18.76



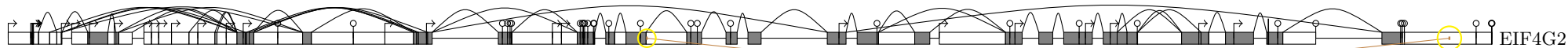
H. Sap	gcagcaaa	gtgagtagaataat	tttgggcttgt	GGGGGTGGGTGGGA	---GGGGTGGGct	GACAGGAA	---ccatagagcct	-----cacacaagc	...395...	ttcttgtgtctg	gtaccttc							
P. Tro	gcagcaaa	gtgagtagaataat	tttgggcttgt	GGGGGTGGGTGGGA	---GGGGTGGGct	GACAGGAA	---ccatagagcct	-----cacacaagc	...395...	ttcttgtgtctg	gtaccttc							
P. Abe	gcagcaaa	gtgagtagaataat	tttgggcttgt	GGGGGTGGGTGGGA	---GGGGA	GGGGct	GACAGA	---aacatagagcct	-----cacacaa	...397...	ttcttgtgtctg	gtaccttc						
C. Jac	gcagcaaa	gtgagtagaataat	tttgggcttgt	gggctgtggcgt	GGGTGGGat	---GGGGTGGGc	TGAG	---aggaaccgtagagcct	-----caca	...407...	tttttgtgtctg	gtaccttc						
M. Mus	gcagcaaa	gtgagtgaataat	tttgggcttgt	GGGGGTGGGTGGGA	-----	-----	-----	-----	...423...	ttcttgtgtctg	gaactttc							
R. Nor	gcagcaaa	gtgagtgaataat	tttgggcttgt	GGGGGTGGGTGGG	-----	-----	-----	-----	...426...	ttcttgtgtt	gaactttc							
C. Por	gcagcaaa	gtgagtggagt	at	tttaggctcgt	GGGGGTGGGTGGGac	---AGGGT	ttGGGAC	GAGAGGA	actgtagaata	-----	catggctc	...365...	ttcttgtgtctg	gtactttc				
O. Cun	gcagcaaa	gtgagtggcat	at	tttgggctcgt	GGGGGTGGGTGGGA	---GGGGG	tgGGGc	AGAGG	---ac	tgccgac	-----	cacagct	...378...	ttcttgtgtctg	gtgctttt			
C. Fam	gcagcaaa	gtgagtggaa	at	tttgggcttgt	GGGGGTGGGTGGGA	---GAAGAG	ATGGGc	GAGA	---ggagcaagagaa	---cct	-----	cacag	...402...	ttcttgtgtctg	gtaccttc			
B. Tau	gcagcaaa	gtgagtggaa	at	tttgggct	GGTGGGGTGGGTGGGA	at	GGGGGG	GGGGc	GAGAGGA	---at	gagagac	---cct	-----	cacagctc	...352...	ttcttgtgtctg	gtaccttc	
E. Cab	gcagcaaa	gtgagtggaa	at	tttgggctcct	GGGGGTGGGTGGGtc	---GGGGGG	GGGGc	TGAGa	GGAG	---ca	gaa	---cct	-----	cgcaggcgggt	...367...	ttcttgtgtctg	gtaccttc	
S. Sus	gcagcaaa	gtgagtggaa	at	tttggactcct	GGGGTGGGTGGGat	GGGGGG	AGGGGc	GAGGAA	---ta	agagac	---cct	-----	cgcggtca	...382...	ttcttgtgtctg	gtaccttc		
L. Afr	gcagcaaa	gtgagtggagt	at	gttgggctcgt	GGGGGTGGGTGGGA	---GGGGT	ttGGGc	GGAGGA	AACAC	---at	gaa	---cct	cgctc	cacacac	...406...	ttcttgtgtctg	gtaccttc	
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

id=532842 gene=ENSG00000168066 name=SF1 segment=chr11.64533886.64534371.-1 type=AN

H. Sap	gctctcct	ggcgcccc	tagcatcgagtg	ttctt	TGTCTTCTTTCTCTCCT	CACCCA	CTCCC	tttgcctctccccaa	accggccg	ccag	gatccctc							
P. Tro	gctctcct	ggcgcccc	tagcatcgagtg	ttctt	TGTCTTCTTTCTCTCCT	CACCCA	CTCCC	tttgcctctccccaa	accggccg	ccag	gatccctc							
P. Abe	gctctcct	ggcgcccc	tagcatcgagtg	ttctt	TGTCTTCTTTCTCTCCT	CACCCA	CTCCC	tttgcctctccccaa	accggccg	ccag	gatccctc							
C. Jac	gctcttct	ggcgcccc	tagcatcgagtg	ttctt	TGTCTTCTTTCTCTCCT	CACCCA	CTCCC	tttgcctctccccaa	accggccg	ccag	gatccctc							
M. Mus	gctttcct	ggca	---cctgtagcatcgagtg	ttctt	TGTCTTCTTTCTCTCCT	CACCCA	CTCCC	tttgcctctccccaa	accggccg	ccag	gatccctc							
R. Nor	gctctcct	ggcgcccc	tagcatcgagtg	ttctt	TGTCTTCTTTCTCTCCT	CACCCA	CTCCC	tttgcctctccccaa	accggccg	ccag	gatccctc							
C. Por	gctctcct	ggcgcccc	tagcatcgagtg	ttctt	TGTCTTCTTTCTCTCCT	CACCCA	CTCCC	tttgcctctccccaa	accggccg	ccag	gatccctc							
O. Cun	gctctcct	ggcg	---cctgtagcatcgagtg	ttctt	TGTCTTCTTTCTCTCCT	CACCCA	CTCCC	tttgcctctccccaa	accggccg	ccag	gatccctc							
C. Fam	gctctcct	ggcgcccc	tagcatcgagtg	ttctt	TGTCTTCTTTCTCTCCT	CACCCA	CTCCC	tttgcctctccccaa	accggccg	ccag	gatccctc							
B. Tau	gctctcct	ggcgcccc	tagcatcgagtg	ttctt	TGTCTTCTTTCTCTCCT	CACCCA	CTCCC	tttgcctctccccaa	accggccg	ccag	gatccctc							
E. Cab	gctctcct	ggcgcccc	tagcatcgagtg	ttctt	TGTCTTCTTTCTCTCCT	CACCCA	CTCCC	tttgcctctccccaa	accggccg	ccag	gatccctc							
S. Sus	gctctcct	ggcgcccc	tagcatcgagtg	ttctt	TGTCTTCTTTCTCTCCT	CACCCA	CTCCC	tttgcctctccccaa	accggccg	ccag	gatccctc							
L. Afr	gctctcct	ggcgcccc	tagcatcga	gtgt	TTCTTTGTCTT	TTTc	TCCTC	CACCCA	CTCCC	tttgcctctccccaa	accggccg	ccag	gatccctc					
*** **	*** **	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

id=532848 gene=ENSG00000168066 name=SF1 segment=chr11.64532991.64533075.-1 type=AN VIEW

Figure 662: CS=6.24



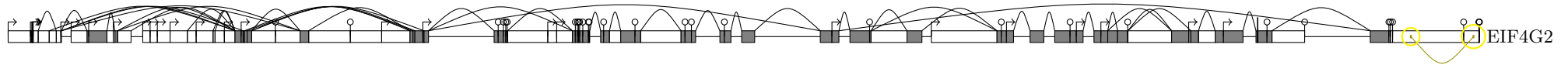
H. Sap	tCAAACA	GTAAG	tg-tgacaggaag-ttaggcg----	..271..	ttattctttag	cttttga
R. Mac	tCAAACA	GTAAG	tg-tgacaggaag-ttaggcg----	..277..	ttattcttgcag	cttttga
P. Tro	tCAAACA	GTAAG	tg-tgacaggaag-ttaggcg----	..267..	ttattctttag	cttttga
P. Abe	tCAAACA	GTAAG	tg-tgacaggaag-ttaggcg----	..274..	ttattcttata	cttttga
C. Jac	tCAAACA	GTAAG	ta-tgatgggaag-ttaggcg----	..276..	ttattctttag	cttttga
M. Mus	tCAAACA	GTAAG	ta-tgactcgaggt-gtagtgg----	..240..	ttcttttggtag	cttttga
R. Nor	tCAAACA	GTAAG	ta-tgacttgagtcagtagt-----	..285..	ttcttttggtag	cttttga
C. Por	tCAAACA	GTAAG	ta-tgatggcagg-ttaggt-----	..447..	tttatttggtag	cttttga
O. Cun	tCAAACA	GTAAG	ta-tgatggactg---taggcctca--	..290..	attctttggtag	cttttga
C. Fam	tCAAACA	GTAAG	ta-tggc---aat-ttaggcctcgg...	..314..	tctttggtatag	cttttga
B. Tau	tCAAACA	GTAAG	tactgattgtgaat-ttaagc-----	..328..	ttcttttggtag	cttttga
E. Cab	tCAAACA	GTAAG	ta-tgactgggaat-ttaggcc-----	..341..	ttcttggtag	cttttga
S. Sus	tCAAACA	GTAAG	ta-tgattaggaat-ttaggt-----	..311..	ttcttttggtag	cttttga
L. Afr	tCAAACA	GTAAG	ta-cgactgggaat-ttaggta-----	..234..	tttttttggtag	cttttga
	*****	*****	* **		* **	*****

id=775188 gene=ENSG0000110321 name=EIF4G2 segment=chr11.10825138_10825445_-1 type=AN

H. Sap	ttttcaca	atatttaaagca...293...	ttggtgttacagaaaattCTTA	CTGTaaTTGA	tggttgttgcgtaatagta...170...	caaatggtgaga	atttgaat
R. Mac	ttttcaca	atatttaaagca...293...	ttggtgttacagaaaattCTTA	CTGTaaTTGA	tggttgttgcgtaatagta...170...	caaatggtgaga	atttgaat
P. Tro	ttttcaca	atatttaaagca...293...	ttggtgttacagaaaattCTTA	CTGTaaTTGA	tggttgttgcgtaatagta...170...	caaatggtgaga	atttgaat
P. Abe	ttttcaca	atatttaaagca...293...	ttggtgttacagaaaattCTTA	CTGTaaTTGA	tggttgttgcgtaatagta...170...	caaatggtgaga	atttgaat
C. Jac	ttttcaca	atatttaaagca...295...	ttggtgttacagaaaattCTTA	CTGTaaTTGA	tggttgttgcagtaatagta...170...	caaatggtgaga	atttgaat
M. Mus	ttttcaca	atatttaaagca...290...	ttggtgttacagaaaattCTTA	CTGTaaTTGA	tggttgttgcgtaatagta...169...	caaatggtgaga	atttgaat
R. Nor	ttttcaca	atatttaaagca...290...	ttggtgttacagaaaattCTTA	CTGTaaTTGA	tggttgttgcgtaatagta...169...	caaatggtgaga	atttgaat
C. Por	ttttcaca	atatttaaagca...294...	ttggtgttacagaaaattCTTA	CTGTaaTTGA	tggttgttgcgtaatagta...170...	caaatggtgaga	atttgaat
O. Cun	ttttcaca	atatttaaagca...298...	ttggtgttacagaaaattCTTA	CTGTaaTTGA	tggttgttgcgtaatagta...170...	caaatggtgaga	atttgaat
C. Fam	ttttcaca	atatttaaagca...293...	ttggtgttacagaaaattCTTA	CTGTaaTTGA	tggttgttgcgtaatagta...169...	caaatggtgaga	atttgaat
B. Tau	ttttcaca	atatttaaagc...294...	ttggtgttacagaaaattCTTA	CTGTaaTTGA	tggttgttgcgtaatagta...170...	caaatggtgaga	atttgaat
E. Cab	ttttcaca	atatttaaagca...293...	ttggtgttacagaaaattCTTA	CTGTaaTTGA	tggttgttgcgtaatagta...170...	caaatggtgaga	atttgaat
S. Sus	ttttcaca	atatttaaagca...293...	ttggtgttacagaaaattCTTA	CTGTaaTTGA	tggttgttgcgtaatagta...170...	caaatggtgaga	atttgaat
L. Afr	ttttcaca	atatttaaagca...291...	ttggtgttacagaaaattCTTA	CTGTaaTTGA	tggttgttgcgtaatagta...170...	caaatggtgaga	atttgaat
	*****	*****	*****	*****	*****	*****	*** **

id=775239 gene=ENSG0000110321 name=EIF4G2 segment=chr11.10818717_10819258_-1 type=EN VIEW

Figure 663: CS=20.44



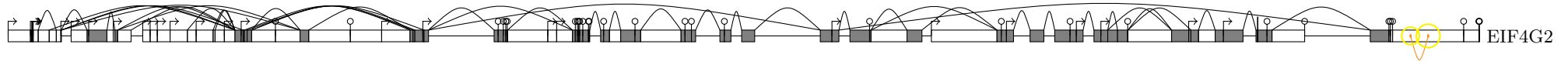
H.Sap	ttttcaca	atatttaaagca...91...-----ctttaatgtttagatagtagtat	ATTAG	caGCATGc	CAATA	attacatcataagttctcaa...370...caaatggtgaga	atttgaat	
R.Mac	ttttcaca	atatttaaagca...91...-----ctttaatgtttagatagtagtat	ATTAG	caGCATGc	CAATA	attacatcataagttctcaa...370...caaatggtgaga	atttgaat	
P.Tro	ttttcaca	atatttaaagca...91...-----ctttaatgtttagatagtagtat	ATTAG	caGCATGc	CAATA	attacatcataagttctcaa...370...caaatggtgaga	atttgaat	
P.Abe	ttttcaca	atatttaaagca...91...-----ctttaatgtttagatagtagtat	ATTAG	caGCATGc	CAATA	attacatcataagttctcaa...370...caaatggtgaga	atttgaat	
C.Jac	ttttcaca	atatttaaagca...94...-----ctttaatgtttagatagtagtat	ATTAG	caGCATGc	CAATA	attacatcataagttctcaa...369...caaatggtgaga	atttgaat	
M.Mus	ttttcaca	atatttaaagca...81...ggagatccttaagtgttag	ATAGAA	taTTAG	caGCATGc	CAATA	attacatcctaagttctcaa...369...caaatggtgaga	atttgaat
R.Nor	ttttcaca	atatttaaagca...81...ggagatccttaagtgttag	ATAGAA	taTTAG	caGCATGc	CAATA	attacatcctaagttctcaa...369...caaatggtgaga	atttgaat
C.Por	ttttcaca	atatttaaagca...92...-----ctttaatgtttagatagtagtat	ATTAG	caGCATGc	CAATA	attacatcataagttctcaa...370...caaatggtgaga	atttgaat	
O.Cun	ttttcaca	atatttaaagca...91...-----ctttaatgtttagatagtagtat	ATTAG	caGCATGc	CAATA	attacatcctgagttctcaa...375...caaatggtgaga	atttgaat	
C.Fam	ttttcaca	atatttaaagca...91...-----ctttaatgtttagatagtagtat	ATTAG	caGCATGc	CAATA	attacatcctaagttctcaa...369...caaatggtgaga	atttgaat	
B.Tau	ttttcaca	atatttaaagca...92...-----ctttaatgtttagatagtagtat	ATTAG	caGCATGc	CAATA	attacatcataagttctcaa...370...caaatggtgaga	atttgaat	
E.Cab	ttttcaca	atatttaaagca...91...-----ctttaatgtttagatagtagtat	ATTAG	caGCATGc	CAATA	attacatcataagttctcaa...370...caaatggtgaga	atttgaat	
S.Sus	ttttcaca	atatttaaagca...91...-----ctttaatgtttagatagtagtat	ATTAG	caGCATGc	CAATA	attacatcataagttctcaa...370...caaatggtgaga	atttgaat	
L.Afr	ttttcaca	atatttaaagca...90...-----ctttaatgtttagatagtagtat	ATTAG	caGCATGc	CAATA	attacatcataagttctcaa...369...caaatggtgaga	atttgaat	
	*****	*****	*	*****	*****	*****	*** **	

id=775239 gene=ENSG00000110321 name=EIF4G2 segment=chr11_10818717_10819258_-1 type=EN

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R.Mac	tggtgaga	atttgaattggt...28...ctacttaatttatcaagtca	TGTTTCATGC	CTGAT	tttatatacttgtagtctatcaataaacattgtgatacttga	tgtagtga
P.Tro	tggtgaga	atttgaattggt...28...ctacttaatttatcaagtca	TGTTTCATGC	CTGAT	tttatatacttgtagtctatcaataaacattgtgatacttga	tgtagtga
P.Abe	tggtgaga	atttgaattggt...28...ctacttaatttatcaagtca	TGTTTCATGC	CTGAT	tttatatacttgtagtctatcaataaacattgtgatacttga	tgtagtga
C.Jac	tggtgaga	atttgaattggt...28...ctacttaatttatcaagtca	TGTTTCATGC	CTGAT	tttatatacttgtagtctatcaataaacattgtgatacttga	tgtagtga
M.Mus	tggtgaga	atttgaattggt...28...ctacttaatttatcaagtca	TGTTTCATGC	CTGATTTTAT	atacttgtagtctatcaataaacattgtgatacttga	tgtagtgg
R.Nor	tggtgaga	atttgaattggt...28...ctacttaatttatcaagtca	TGTTTCATGC	CTGATTTTAT	atacttgtagtctatcaataaacattgtgatacttga	tgtagtgg
C.Por	tggtgaga	atttgaattggt...28...ctacttaatttatcaagtca	TGTTTCATGC	CTGAT	tttatatacttgtagtctatcaataaacattgtgatacttga	tgtagttg
O.Cun	tggtgaga	atttgaattggt...28...ctacttaatttatcaagtca	TGTTTCATGC	CTGAT	tttatatacttgtagtctatcaataaacattgtgatacttga	tgtagttg
C.Fam	tggtgaga	atttgaattggt...28...ctacttaatttatcaagtca	TGTTTCATGC	CTGAT	tttatatacttgtagtctatcaataaacattgtgatacttga	tagagttg
B.Tau	tggtgaga	atttgaattggt...28...ctacttaatttatcaagtca	TGTTTCATGC	CTGAT	tttatatacttgtagtctatcaataaacattgtgatacttga	taaagttg
E.Cab	tggtgaga	atttgaattggt...28...ctacttaatttatcaagtca	TGTTTCATGC	CTGAT	tttatatacttgtagtctatcaataaacattgtgatacttga	tgtggttg
S.Sus	tggtgaga	atttgaattggt...28...ctacttaatttatcaagtca	TGTTTCATGC	CTGAT	tttatatacttgtagtctatcaataaacattgtgatacttga	tataattg
L.Afr	tggtgaga	atttgaattggt...28...ctacttaatttatcaagtca	TGTTTCATGC	CTGAT	tttatatacttgtagtctatcaataaacattgtgatacttga	tgtagttg
	*****	**** *	*****	*****	*****	*

id=775240 gene=ENSG00000110321 name=EIF4G2 segment=chr11_10818601_10818716_-1 type=EN VIEW

Figure 664:



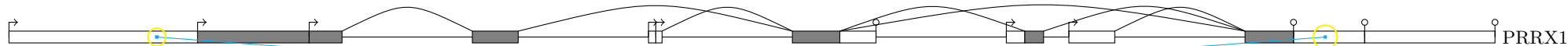
H.Sap	ttttcaca	atatttaaagca...86...agtatctttaatggttagat	AGTATATTAGCAG	caTGCA	ataattacatcataagttct...373...caaatggtgaga	atttgaat
R.Mac	ttttcaca	atatttaaagca...86...agtatctttaatggttagat	AGTATATTAGCAG	caTGCA	ataattacatcataagttct...373...caaatggtgaga	atttgaat
P.Tro	ttttcaca	atatttaaagca...86...agtatctttaatggttagat	AGTATATTAGCAG	caTGCA	ataattacatcataagttct...373...caaatggtgaga	atttgaat
P.Abe	ttttcaca	atatttaaagca...86...agtatctttaatggttagat	AGTATATTAGCAG	caTGCA	ataattacatcataagttct...373...caaatggtgaga	atttgaat
C.Jac	ttttcaca	atatttaaagca...89...agtatctttaatggttagat	AGTATATTAGCAG	caTGCA	ataattacatcataagttct...372...caaatggtgaga	atttgaat
M.Mus	ttttcaca	atatttaaagca...87...---tccttaagtgttagatagaa	TATTAGCAG	caTGCA	ataattacatcctaagttct...372...caaatggtgaga	atttgaat
R.Nor	ttttcaca	atatttaaagca...87...---tccttaagtgttagatagaa	TATTAGCAG	caTGCA	ataattacatcctaagttct...372...caaatggtgaga	atttgaat
C.Por	ttttcaca	atatttaaagca...87...agtatctttaatggttagat	AGTATATTAGCAG	caTGCA	ataattacatcataagttct...373...caaatggtgaga	atttgaat
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C.Fam	ttttcaca	atatttaaagca...86...agtatctttaatggttagat	AGTATATTAGCAG	caTGCA	ataattacatcctaagttct...372...caaatggtgaga	atttgaat
B.Tau	ttttcaca	atatttaaagca...87...agtatctttaatggttagat	AGTATATTAGCAG	caTGCA	ataattacatcataagttct...373...caaatggtgaga	atttgaat
E.Cab	ttttcaca	atatttaaagca...86...agtatctttaatggttagat	AGTATATTAGCAG	caTGCA	ataattacatcataagttct...373...caaatggtgaga	atttgaat
S.Sus	ttttcaca	atatttaaagca...86...agtatctttaatggttagat	AGTATATTAGCAG	caTGCA	ataattacatcataagttct...373...caaatggtgaga	atttgaat
L.Afr	ttttcaca	atatttaaagca...85...agtatctttaatggttagat	AGTATATTAGCAG	caTGCA	ataattacatcataagttct...372...caaatggtgaga	atttgaat
	*****	*****	** *****	*****	*****	**** **

id=775239 gene=ENSG00000110321 name=EIF4G2 segment=chr11_10818717_10819258_-1 type=EN

H.Sap	ttttcaca	atatttaaagca...224...aacactgaatactgtagaaa	TGCA	ctTTGCTcAGTAaTACT	tgagttggtgcaatatttga...233...caaatggtgaga	atttgaat
R.Mac	ttttcaca	atatttaaagca...224...aacactgaatactgtagaaa	TGCA	ctTTGCTcAGTAaTACT	tgagttggtgcaatatttga...233...caaatggtgaga	atttgaat
P.Tro	ttttcaca	atatttaaagca...224...aacactgaatactgtagaaa	TGCA	ctTTGCTcAGTAaTACT	tgagttggtgcaatatttga...233...caaatggtgaga	atttgaat
P.Abe	ttttcaca	atatttaaagca...224...aacactgaatactgtagaaa	TGCA	ctTTGCTcAGTAaTACT	tgagttggtgcaatatttga...233...caaatggtgaga	atttgaat
C.Jac	ttttcaca	atatttaaagca...226...aacactgaatactgtagaaa	TGCA	ctTTGCTcAGTAaTACT	tgagttggtgcaatatttga...233...caaatggtgaga	atttgaat
M.Mus	ttttcaca	atatttaaagca...221...aacactgaatactgtagaga	TGCA	ctTTGCTcAGTAatacttgagttggtgcaata----	...237...caaatggtgaga	atttgaat
R.Nor	ttttcaca	atatttaaagca...221...aacactgaatactgtagaga	TGCA	ctTTGCTcAGTAatacttgagttggtgcaata----	...237...caaatggtgaga	atttgaat
C.Por	ttttcaca	atatttaaagca...225...aacactgaatactgtagaaa	TGCA	ctTTGCTcAGTAaTACT	tgagttggtgcaatatttga...233...caaatggtgaga	atttgaat
O.Cun	ttttcaca	atatttaaagca...229...aacactgaatactgtagaaa	TGCA	ctTTGCTcAGTAaTACT	tgagttggtgcaatatttga...233...caaatggtgaga	atttgaat
C.Fam	ttttcaca	atatttaaagca...224...aacactgaatactgtagaaa	TGCA	ctTTGCTcAGTAaTACT	tgagttggtgcaatatttga...232...caaatggtgaga	atttgaat
B.Tau	ttttcaca	atatttaaagca...225...aacactgaatactgtagaaa	TGCA	ctTTGCTcAGTAaTACT	tgagttggtgcaatatttga...233...caaatggtgaga	atttgaat
E.Cab	ttttcaca	atatttaaagca...224...aacactgaatactgtagaaa	TGCA	ctTTGCTcAGTAaTACT	tgagttggtgcaatatttga...233...caaatggtgaga	atttgaat
S.Sus	ttttcaca	atatttaaagca...224...aacactgaatactgtagaaa	TGCA	ctTTGCTcAGTAaTACT	tgagttggtgcaatatttga...233...caaatggtgaga	atttgaat
L.Afr	ttttcaca	atatttaaagca...223...aacactgaatactgtagaaa	TGCA	ctTTGCTcAGTAaTACT	tgagttggtgcaatatttga...232...caaatggtgaga	atttgaat
	*****	*****	*****	*****	*****	**** **

id=775239 gene=ENSG00000110321 name=EIF4G2 segment=chr11_10818717_10819258_-1 type=EN VIEW

Figure 665:



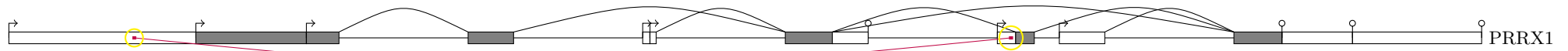
H. Sap	ggtcccgag	ggaaggaggaa...515...ttaaactt--t-aaaaaacca	TTCAc	TTTg	TTCTc	TCTCC	cacccttcttctcttcttct...124...acatagggtgac	tttttaat
R. Mac	ggtcccgag	ggaaggaggaa...525...-ttaaactt--tgaaaaaaccc	TTCAc	TTTg	TTCTc	TCTCC	cacccttcttctcttcttct...124...acatagggtgac	tttttaat
P. Tro	ggtcccgag	ggaaggaggaa...516...ttaaactt--t-aaaaaacca	TTCAc	TTTg	TTCTc	TCTCC	cacccttcttctcttcttct...124...acatagggtgac	tttttaat
P. Abe	ggtcccgag	ggaaggaggaa...516...ttaaactt--t-aaaaaacca	TTCAc	TTTg	TTCTc	TCTCC	cactccttctcttcttcttct...121...acatagggtgac	tttttaat
M. Mus	ggtcccgag	gaaaaggagta...511...tctaattttttt-----aaagccac---	TTTg	TTCTc	TCTCC	acccttcttctcttcttctg...124...gcatagggtgtt	tgttttgt	
R. Nor	agtccgag	gaaaaggagta...509...-----actttttttttaaaccac---	TTTg	TTCTc	TCTCC	acccttcttctcttcttctg...124...gcttagcgtgtt	tgttttgt	
C. Por	ggtctgag	ggaaggaggaa...539...-----aacatttttttaaaaccac---	TTTg	TTCTc	TCTCC	cacccttctctcctgctgct...120...gaacagggtaac	tttttaat	
O. Cun	ggtccgag	ggaaggaggaa...539...aagaaa-----agaaacaaccac---	TTTg	TTCTc	TCTCC	cacccttctctctcttcttctg...125...acatagggtggt	tttttact	
C. Fam	ggtcccgag	ggaaggaggaa...517...tgaaaa-----aaaaaaaaaacac---	TTTg	TTCTc	TCTCC	cacccttcttctcttcttct...124...acatagggtgac	tttttaat	
F. Cat	ggtcccgag	ggaaggaggaa...497...-----ccttgaaaaaaaaaacccac---	TTTg	TTCTc	TCTCC	cacccttcttctcttcttct...109...acatagggtgac	tttttaat	
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O. Avi	ggtctgag	ggaaggaggaa...504...taaaaa-----aaaaaaaaactacac---	TTTg	TTCTc	TCTCC	cacccttcttctcttcttct...135...acatagggtgac	ttttcatt	
L. Afr	ggtcccgag	ggaaggaggaa...517...-----cctttttaagaaaaaccac---	TTTg	TTCTc	TCTCC	cacccttcttcttcttcttcc...121...acacagggtgac	ttcctaat	
	***	* * * * * * * *	*	*****	*****	** * * * *	* * *	* * *

id=786661 gene=ENSG00000116132 name=PRRX1 segment=chr1_170632323.170633046.1 type=E5

H. Sap	aaccataa	gacacctatcct...76...gaccatggcagagaaaagca	GGAGAGGAGCAAA	TGAA	aattagttaacaaatgttcc...115...-ccccatgattg	tatgaagt	
R. Mac	aaccataa	gacacctatccc...82...gaccatggcagagaaaagca	GGAGAGGAGCAAA	TGAA	aattagttaacaaatgttcc...116...-ccccatgattg	tatgaagt	
P. Tro	aaccataa	gacacctatccc...76...gaccatggcagagaaaagca	GGAGAGGAGCAAA	TGAA	aattagttaacaaatgttcc...116...-ccccatgattg	tatgaagt	
P. Abe	aaccataa	gacacctatccc...76...gaccatggcagagaaaagca	GGAGAGGAGCAAA	TGAA	aattagttaacaaatgttcc...116...-ccccatgattg	tatgaagt	
M. Mus	aaccataa	gacacctatcct...73...gaccatggcggagcaaaagca	GGAGAGGAACAAA	atgaaaatagttaacaaat-----	...122...-ttcctataattg	tatgagaa	
R. Nor	aaccataa	gacacctatcct...73...gaccatggcggagaaaagca	GGAGAGGAACAAA	atgaaaatagttaacaaat-----	...114...-ttcctataattg	tatgagaa	
C. Por	aaccataa	gacacctatcct...69...gaccatggcagagaaaagca	GGAGAGGAGCAAA	atgaaaatagttaacaaat-----	...121...-ctccatgattg	tatgaagt	
O. Cun	aaccataa	gacacctatcct...69...gaccatggcagagaaaagca	GGAGAGGAGCAAA	atgaaaatagttaacaaat-----	...121...-ctccatgattg	tatgaagt	
C. Fam	aaccataa	gacacctatcct...80...gaccatggcagagaaaagca	GGAGAGGAGCAAA	atgaaaatagttaacaaat-----	...123...-ccccatgatcg	tatgggtt	
F. Cat	aaccatta	gacacatcct...78...gaccatggcagagaaaagca	GGAGAGGAGCAAA	atgaaaatagttaacaaat-----	...124...-ccccatgattg	tatgggtt	
B. Tau	aaccataa	gacacctatcct...87...gaccatggcagagaaaagca	GGAGAGGAGCAAA	atgaaaatagttaacaaat-----	...123...-ctccatgattg	tatgggtt	
E. Cab	aaccataa	gacacctatcct...74...gaccatggcagagaaaagca	GGAGAGGAGCAAA	atgaaaatagttaccaaat-----	...122...-acccaatgat-g	tatgggtt	
S. Sus	aaccataa	gacacctatcct...78...gaccatggcagagaaaagca	GGAGAGGAGCAAA	atgaaaatagttaacaaat-----	...123...-ccccatgattg	tatgggtt	
O. Avi	aaccataa	gacacctatcct...74...gaccatggcagagaaaagca	GGAGAGGAGCAAA	atgaaaatagttaacaaat-----	...123...-ccccatgattg	tataggtt	
L. Afr	aaccataa	gacacctatcct...60...gaccatggcagacaaaagca	GGAGAGGAGCAAA	acgaaaatagttaacaaat-----	...120...-ccccgttgggtg	tatgagat	
	*****	* * * * * * * *	*****	**	*****	** * * *	***

id=786679 gene=ENSG00000116132 name=PRRX1 segment=chr1_170705375.170705647.1 type=E3 VIEW

Figure 666:



H. Sap	ggtcccag	ggaaggaggaa...438...cgtttcttgaagatgtttAAAGctGGAACAAGCC	ttcttctggtgcttgaa---...206...acatagggtgac	ttttaat
R. Mac	ggtcccag	ggaaggaggaa...447...cgtttcttgaagatgtttAAAGctGGAACAAGCC	ttcttctggtgcttgaa---...207...acatagggtgac	ttttaat
P. Tro	ggtcccag	ggaaggaggaa...439...cgtttcttgaagatgtttAAAGctGGAACAAGCC	ttcttctggtgcttgaa---...206...acatagggtgac	ttttaat
P. Abe	ggtcccag	ggaaggaggaa...439...cgtttcttgaagatgtttAAAGctGGAACAAGCC	ttcttctggtgcttgaa---...203...acatagggtgac	ttttaat
C. Jac	ggtcccag	ggaaggaggaa...443...cgtttcttgaagatgtttAAAGctGGAACAAGCC	ttcttctggtgcttgaa---...208...acatagggtgac	ttttaat
M. Mus	ggtcccag	ggaaggaggaa...419...cgtttcttgaagatgtttAAAGctGGAACAAGCC	ttcttctggtgcttgaa---...216...gcatagggtgac	ttttaat
R. Nor	agtcccag	ggaaggaggaa...416...cgtttcttgaagatgtttAAAGctGGAACAAGCC	ttcttctggtgcttgaa---...217...gcttagcgtgt	ttttaat
C. Por	ggtctgag	ggaaggaggaa...454...cgtttcttgaagatgtttAAAGctGGAACAAGCC	ttcttctggtgcttgaa---...205...gaacagggtaac	ttttaat
O. Cun	ggtccgag	ggaaggaggaa...433...cgtttcttgaagatgtttAAAGctGGAACAAGCC	ttcttctggtgcttgaa---...231...acatagggtgac	ttttaat
C. Fam	ggtcccag	ggaaggaggaa...432...cgtttcttgaagatgtttAAAGctGGAACAAGCC	ttcttctggtgcttgaa---...209...acatagggtgac	ttttaat
F. Cat	ggtcccag	ggaaggaggaa...415...cgtttcttgaagatgtttAAAGctGGAACAAGCC	ttcttctggtgcttgaa---...191...acatagggtgac	ttttaat
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S. Sus	ggtctgag	ggaaggaggaa...419...cgtttcttgaagatgtttAAAGctGGAACAAGCC	ttcttctggtgcttgaa---...236...acatagggtgac	ttttaat
O. Avi	ggtctgag	ggaaggaggaa...419...cgtttcttgaagatgtttAAAGctGGAACAAGCC	ttcttctggtgcttgaa---...220...acatagggtgac	ttttaat

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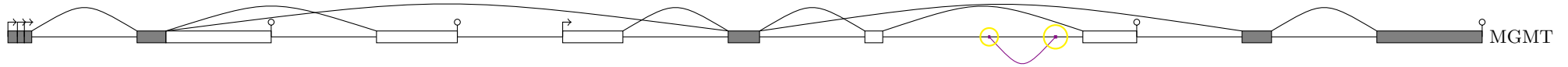
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H. Sap	tttgatcg	tggatgatgctgctgacatctgctgaacgcatTTGGCTTatTTCTccCTTTcacactttcaaaaatag	atcctcgt
R. Mac	tttgatca	tggatgatgctgctgacatctgctgaacgcatTTGGCTTatTTCTccCTTTcacactttcaaaaatag	atcctcgt
P. Tro	tttgatcg	tggatgatgctgctgacatctgctgaacgcatTTGGCTTatTTCTccCTTTcacactttcaaaaatag	atcctcgt
P. Abe	tttgatcg	tggatgatgctgctgacatctgctgaacgcatTTGGCTTatTTCTccCTTTcacactttcaaaaatag	atcctcgt
C. Jac	tttgatcg	tggatgatgctgctgacatctgctgaacgcatTTGGCTTatTTCTccCTTTcacactttcaaaaatag	atcctcgt
M. Mus	ggtggtct	tggatgatgctgctgacatctgctgaacgcatTTGGCTTatTTCTccCTTTcacactttcaaaaatag	atcctcgt
R. Nor	ggtggtct	tggatgatgctgctgacatctgctgaacgcatTTGGCTTatTTCTccCTTTcacactttcaaaaatag	atcctcgt
C. Por	tttgatca	tggatgatgctgctgacatctgctgaacgcatTTGGCTTatTTCTccCTTTcacactttcaaaaatag	atcctcgt
O. Cun	tttgatcg	tggatgatgctgctgacatctgctgaacgcatTTGGCTTatTTCTccCTTTcacactttcaaaaatag	atcctcgt
C. Fam	tttgatcg	tggatgatgctgctgacatctgctgaacgcatTTGGCTTatTTCTccCTTTcacactttcaaaaatag	atcctcgt
F. Cat	tttgatcg	tggatgatgctgctgacatctgctgaacgcatTTGGCTTatTTCTccCTTTcacactttcaaaaatag	atcctcgt
B. Tau	tttgatcg	tggatgatgctgctgacatctgctgaacgcatTTGGCTTatTTCTccCTTTcacactttcaaaaatag	atcctcgt
E. Cab	attgatcg	tggatgatgctgctgacatctgctgaacgcatTTGGCTTatTTCTccCTTTcacactttcaaaaatag	atcctcgt
S. Sus	tttgatcg	tggatgatgctgctgacatctgctgaacgcatTTGGCTTatTTCTccCTTTcacactttcaaaaatag	atcctcgt
O. Avi	tttgatcg	tggatgatgctgctgacatctgctgaacgcatTTGGCTTatTTCTccCTTTcacactttcaaaaatag	atcctcgt

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id=786673 gene=ENSG00000116132 name=PRRX1 segment=chr1_170699347_170699417.1 type=AN VIEW

Figure 667:



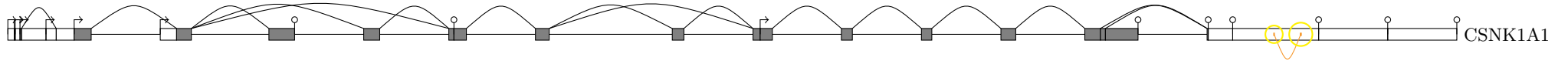
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R. Mac	ttttacag	gtaatgttagtg...	1502...	tgcttcagcccggcaacaca	AAAAATACATCAAGAC	caattacggtatcaacttc...	415...	tcttcttttag	agtgcttc
P. Tro	ttttacag	gtaatgttagtg...	1517...	tgcttcagcccggcaacaca	AAAAATACATCAAGAC	caattacggtatcaacttc...	415...	tcttcttttag	agtgcttc
P. Abe	ttttacag	gtaatgttagtg...	1515...	tgcttcagcccggcaacaca	AAAAATACATCAAGAC	caattacggtatcaacttc...	415...	tcttcttttag	agtgcttc
C. Jac	tttaacag	gtaatgttagtg...	1506...	tgcttcagcccggcaacaca	AAAAATACATCAAGAC	caattacggtatcaacttc...	412...	tcttcttttag	agtgcttc
M. Mus	tatgacag	gtaaccttaatc...	1472...	tgcttcagcccggcaacaca	AAAAATACATCAAGAC	caattacggtatcaacttc...	413...	tcttcttttag	agtgcttc
R. Nor	tattatag	gtaatcttaatc...	1499...	tgcttcagcccggcaacaca	AAAAATACATCAAGAC	caattacggtatcaacttc...	413...	tcttcttttag	agtgcttc
O. Cun	ttttgtag	gtagacttagta...	1404...	tgcttcagcccggcaacaca	AAAAATACATCAAGAC	caattacggtatcaacttc...	412...	tcttcttttag	agtgcttc
C. Fam	ttttacag	gcagtgtaaatg...	1409...	tgcttcagcccggcaacaca	AAAAATACATCAAGAC	caattacggtatcaacttc...	412...	tcttcttttag	agtgcttc
F. Cat	ttttacag	gcagcgttaaatg...	1287...	tgcttcagcccggcaacaca	AAAAATACATCAAGAC	caattacggtatcaacttc...	414...	tcttcttttag	agtgcttc
B. Tau	atttacag	gcaacattaacg...	1543...	tgcttcagcccggcaacaca	AAAAATACATCAAGAC	caattacggtatcaacttc...	416...	tcttcttttag	agtgcttc
E. Cab	ttttacag	gcagtgtagcg...	1448...	tgcttcagcccggcaacaca	AAAAATACATCAAGAC	caattacggtatcaacttc...	412...	tcttcttttag	agtgcttc
S. Sus	acgtacag	gcagcgttcgta...	1434...	tgcttcagcccggcaacaca	AAAAATACATCAAGAC	caattacggtatcaacttc...	414...	tcttcttttag	agtgcttc
L. Afr	ttttacag	gtaatgttaata...	1682...	tgcttcagcccggcaacaca	AAAAATACATCAAGAC	caattacggtatcaacttc...	412...	tcttcttttag	agtgcttc
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id=54420 gene=ENSG00000170430 name=MGMT segment=chr10.131513869_131515875.1 type=IN

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R. Mac	ttttacag	gtaatgttagtg...	1818...	agattattagtcaggaggaga	GTCTctTGATttGTATTTT	aatggaatttacatttctc...	95...	tcttcttttag	agtgcttc
P. Tro	ttttacag	gtaatgttagtg...	1833...	agattattagtcaggaggaga	GTCTctTGATttGTATTTT	aatggaatttacatttctc...	95...	tcttcttttag	agtgcttc
P. Abe	ttttacag	gtaatgttagtg...	1831...	agattattagtcaggaggaga	GTCTctTGATttGTATTTT	aatggaatttacatttctc...	95...	tcttcttttag	agtgcttc
C. Jac	tttaacag	gtaatgttagtg...	1822...	agattattagtcaggaggaga	GTCTctTGATttGTATTTT	aatggaatttacatttctc...	92...	tcttcttttag	agtgcttc
M. Mus	tatgacag	gtaaccttaatc...	1788...	agattattagtcaggaggaga	GTCTctTGATttGTATTTT	aatggaatttacatttctc...	93...	tcttcttttag	agtgcttc
R. Nor	tattatag	gtaatcttaatc...	1815...	agattattagtcaggaggaga	GTCTctTGATttGTATTTT	aatggaatttacatttctc...	93...	tcttcttttag	agtgcttc
O. Cun	ttttgtag	gtagacttagta...	1720...	agattattagtcaggaggaga	GTCTctTGATttGTATTTT	aatggaatttacatttctc...	92...	tcttcttttag	agtgcttc
C. Fam	ttttacag	gcagtgtaaatg...	1723...	agattattagtcaggaggaga	GTCTctTGATttGTATTTT	aatggaatttacatttctc...	94...	tcttcttttag	agtgcttc
F. Cat	ttttacag	gcagcgttaaatg...	1601...	agattattagtcaggaggaga	GTCTctTGATttGTATTTT	aatggaatttacatttctc...	96...	tcttcttttag	agtgcttc
B. Tau	atttacag	gcaacattaacg...	1859...	agattattagtcaggaggaga	GTCTctTGATttGTATTTT	aatggaatttacatttctc...	96...	tcttcttttag	agtgcttc
E. Cab	ttttacag	gcagtgtagcg...	1762...	agattattagtcaggaggaga	GTCTctTGATttGTATTTT	aatggaatttacatttctc...	94...	tcttcttttag	agtgcttc
S. Sus	acgtacag	gcagcgttcgta...	1750...	agattattagtcaggaggaga	GTCTctTGATttGTATTTT	aatggaatttacatttctc...	94...	tcttcttttag	agtgcttc
L. Afr	ttttacag	gtaatgttaata...	1997...	agattattagtcaggaggaga	GTCTctTGATttGTATTTT	aatggaatttacatttctc...	93...	tcttcttttag	agtgcttc
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Figure 668:



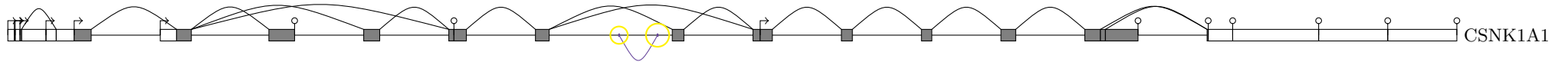
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O. Cun	gatgctgt	atcctgagttgt...251...-cttaggggtttttccacccc	TGGGGTTTGCAAGTT	-gttcacttaaaacattctta-----	...293...acaatctgggat	tttgtttt
C. Fam	gatgccgt	gtcctgagttgt...250...-tcttaggg-tttatccatccc	TGGGGTTTGCAAGTT	-gttcacttaaaacattctta-----	...294...atgatctgggat	tttgtttt
B. Tau	gatgctgt	gtcctgagttgt...249...-tcttaggg-tttatccatccc	TGGGGTTTGCAAGTT	-gttcacttaaaacattctta-----	...295...atgatctgggat	tttgtttt
E. Cab	gatgctgt	gtcccagttgt...248...-tcttaggg-tttatccatccc	TGGGGTTTGCAAGTT	-gttcacttaaaacattctta-----	...293...atgatctgggat	tttgtttt
S. Sus	gatactgc	gtcccagttgt...251...-tcttaggg-tttcttcatccc	TGGGGTTTGCAAGTT	-gttcacttaaaacattctta-----	...290...atgatctgggat	tttgtttt
L. Afr	gatgctgt	gttctaagttgt...249...-tcttaggg-tttttccatccc	TGGGGTTTGCAAGTT	-gttcacttaaaacattctta-----	...292...atgacctgggt	tttgtttt
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P. Tro	gatgctgt	atcctgagttgt...446...-----gactactagattatccttag	GACTCTGCAttAACTCTA	taatgttcttggtattaaaa...94...atgatctgggat	tttgtttt
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C. Jac	gatgctgt	atcctgagttgt...443...-----gactactagattatccttag	GACTCTGCAttAACTCTA	taatgttcttggtattaaaa...99...atgatctgggat	tttgtttt
M. Mus	cactgctg	atcctgagctgt...455...-----tagcgactactagattcctt	TTAGGACTCTGCAttAACTCTA	taatgttcttggtattaaaa...93...acgatctgggat	tttgtttt
R. Nor	cactgctg	atcctgagctgt...437...aaaacatagcgactactaga	TTATctTTAGGACTCTGCAttAACTCTA	taatgttcttggtattaaaa...92...atgatctgggat	tttgtttt
C. Por	gaagcttt	gtctggagttgt...454...-----gactactagattatccttag	GACTCTGCAttAACTCTA	taatgttcttggtattaaac...87...atgatctgggat	tttgtttt
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B. Tau	gatgctgt	gtcctgagttgt...445...-----gactactagattatccttag	GACTCTGCAttAACTCTA	taatgttcttggtattaaaa...96...atgatctgggat	tttgtttt
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L. Afr	gatgctgt	gttctaagttgt...443...-----gactactagattatccttag	GACTCTGCAttAACTCTA	taatgttcttggtattaaag...95...atgacctgggt	tttgtttt
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id=54125 gene=ENSG00000113712 name=CSNK1A1 segment=chr5_148875617_148876238_-1 type=E3 VIEW

Figure 669:



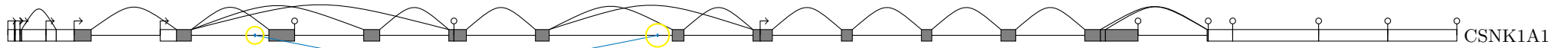
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R. Mac	gtaataag	gttagtcaaatg...	1967...	cttacgaaaataaa-ttttaa	GGTGA	CTAAATGCCTTCT	acctcctt-ccttactgaagat...	354...	ttgtctgtttag	tgtttaga
P. Tro	gtaataag	gttagtcaaatg...	1976...	cttacgaaaataaa-ttttaa	GGTGA	CTAAATGCCTTCT	acctcctt-ccttactgaagat...	354...	ttgtctgtttag	tgtttaga
P. Abe	gtaataag	gttagtcaaatg...	1980...	cttacgaaaataaa-ttttaa	GGTGA	CTAAATGCCTTCT	acctcctt-ccttactgaagat...	353...	ttgtctgtttag	tgtttaga
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R. Nor	gtaataag	gttagtcaaatg...	1887...	ggtttaaaataaa-ttttaa	GGTGA	CTAAATGCCTTCT	acctcctt-ccttactgaagat...	344...	ttgtctgtttag	tgtttaga
C. Por	gtaataag	gttagtcaaatg...	1935...	-ttttgaaaataaa-ttttaa	GGTGA	CTAAATGCCTTCT	acctcctt-ccttactgaagat...	354...	ttgtctgtttag	tgtttaga
O. Cun	gtaataag	gttagtcaaatg...	1970...	cttatgaaaataaa-ttttaa	GGTGA	CTAAATGCCTTCT	acctcctt-ccttactgaagat...	349...	ttgtctgtttag	tgtttaga
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B. Tau	gtaataag	gttagtcaaatg...	1428...	cttatgaaaataaa-ttttaa	GGTGA	CTAAATGCCTTCT	acctcctt-ccttactgaagat...	353...	ttgtctgtttag	tgtttaga
E. Cab	gtaataag	gttagtcaaatg...	1988...	cttatgaaaataaa-ttttaa	GGTGA	CTAAATGCCTTCT	acctcctt-ccttactgaagat...	350...	ttgtctgtttag	tgtttaga
S. Sus	gtaataag	gttagtcaaatg...	2025...	-ttatgaaaataaa-ttttaa	GGTGA	CTAAATGCCTTCT	acctcctt-ccttactgaagat...	347...	ttgtctgtttag	tgtttaga
O. Avi	gtaataag	gttagtcaaatg...	1552...	nnntattaagaaa-ttaag---	AGCCAAATGTC	A-cattgctatccctgtttca---	222...	ttgtctgtttag	tgtttaga	
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O. Cun	gtaataag	gttagtcaaatg...	2248...	-ctacagtgcttggtggaaga	AGGAT	GGCATTGGC	TACC	ctgttctttctctaatgcct...	70...	ttgtctgtttag	tgtttaga
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E. Cab	gtaataag	gttagtcaaatg...	2267...	-ctacagtgcttggtggaaga	AGGAT	GGCATTGGC	TACC	ctgttctttctctaatgcct...	70...	ttgtctgtttag	tgtttaga
S. Sus	gtaataag	gttagtcaaatg...	2302...	gctacagtgcct-gtgggaaga	AGGAT	GGCATTGGC	TACC	ctgttctttctctaatgcct...	69...	ttgtctgtttag	tgtttaga
O. Avi	gtaataag	gttagtcaaatg...	1702...	----agtgccttggtggaaga	TGGCATTGGCT	accctgttctttctctaatg---	72...	ttgtctgtttag	tgtttaga		
L. Afr	gtaataag	gttagtcaaatg...	2209...	-ctacagtgcttggtggaaga	AGGAT	GGCATTGGC	TACC	ctgttctttctctaatgcct...	70...	ttgtctgtttag	tgtttaga
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Figure 670:



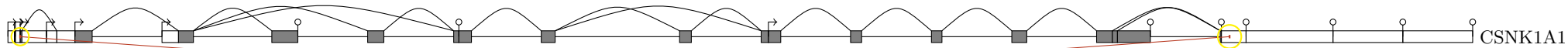
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E. Cab	cacatacg	gtaagaaccctg... 420...	-tcttttg	tgtgtgtgtgt	CCAAc	ATGTC	TCCT	cctccgcttagaaaatggcg... 69...	ttccctcctttag	cagccctg
S. Sus	cacatacg	gtaagagtccgt... 381...	ctcttttg	tgtgtg-tttgt	CCAAc	ATGTC	TCCT	gctccgcttagaaaatggcg... 67...	acgccccggcg	cagccctg
O. Avi	cacatacg	gtaagaatcctt... 407...	-tcttttg	tgtgtgtgtgt	CCAAc	ATGTC	TCCT	cctccgcttagaaaatggcg... 69...	ttcctcctttgg	cagctccg
L. Afr	cacatacg	gtaagaaccctc... 419...	-tcttttg	tgtgtgtgtgt	CCAAc	ATGTC	TCCT	cctccgcttagaaaatggcg... 69...	ttccccttttag	ctgcctg
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C. Por	gtaataag	gtagtcaaatg... 2218...	-ctacagt	gcttggtggaaga	AGGAt	GGCATTGG	ctaccctgttctttctctaa... 75...	ttgtctgtttag	tgtttaga
O. Cun	gtaataag	gtagtcaaatg... 2248...	-ctacagt	gcttggtggaaga	AGGAt	GGCATTGG	ctaccctgttctttctctaa... 75...	ttgtctgtttag	tgtttaga
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E. Cab	gtaataag	gtagtcaaatg... 2267...	-ctacagt	gcttggtggaaga	AGGAt	GGCATTGG	ctaccctgttctttctctaa... 75...	ttgtctgtttag	tgtttaga
S. Sus	gtaataag	gtagtcacatg... 2302...	gctacagt	gctt-gtgggaaga	AGGAt	GGCATTGG	ctaccctgttctttctctga... 74...	ttgtctgttcag	tgtttaga
O. Avi	gtaataag	gtagtcacatg... 1698...	-ctacagt	gcttggtggaaga	AGGAt	GGCATTGG	ctaccctgttctttctctaa... 74...	ttgtctgtttag	tgtttaga
L. Afr	gtaataag	gtagtcaaatg... 2209...	-ctacagt	gcttggtggaaga	AGGAt	GGCATTGG	ctaccctgttctttctctaa... 75...	ttgtctgtttag	tgtttaga
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id=54107 gene=ENSG00000113712 name=CSNK1A1 segment=chr5.148897441.148899852_-1 type=IN VIEW

Figure 671: CS=6.24



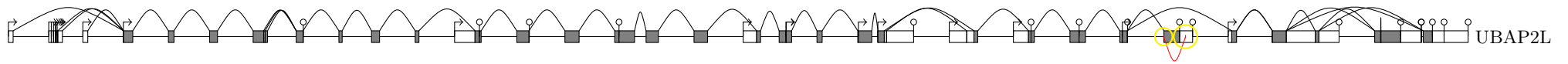
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R. Mac	ct	gggggc	a-ttttgtgttgctggagct	GGAGtAACAAaGATGg	cggcgtcg
P. Tro	ct	gggggc	a-ttttgtgttgctggagct	GGAGtAACAAaGATGg	cgtcgtcc
P. Abe	ct	gggggc	a-ttttgtgttgctggagct	GGAGtAACAAaGATGg	cgtcgtcg
C. Jac	ct	gggggc	a-ttttgtgttgctggagct	GGAGtAACAAaGATGg	cgtcgtcg
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B. Tau	ct	gggggc	a-ttttgtgttgctggagcc	GGAGtAACAAaGATGg	cggcgtcg
E. Cab	ct	gggggc	at-ttttgtgttgctggagcc	GGAGtAACAAaGATGg	cggcgtca
S. Sus	ct	gggggc	a-ttttgtgttgctggagcc	GGAGcAACAAaGATGg	cggcgtcg
O. Avi	ct	gggggc	a-ttttgtgttgctggagcc	GGAGtAACAAaGATGg	cggcgtcg
L. Afr	ct	gggggc	a-ttttgtgttgctggtgcc	GGAGGAACAaGATGg	cggcgtcg
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id=54089 gene=ENSG00000113712 name=CSNK1A1 segment=chr5.148930920.148930954.-1 type=E5

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R. Mac	gtttctaa	gcatgaattgaggaacagaagaagcagagcagatgatcggagcag	CATTTGTTtCTCC	cctcaaatctagaaat-ttagt...87...tggtgatgctgt	gtcctgag
P. Tro	gtttctaa	gcatgaattgaggaacagaagaagcagagcagatgatcggagcag	CATTTGTTtCTCC	cctcaaatctagaaat-ttagt...87...tggtgatgctgt	atcctgag
P. Abe	gtttctaa	gcatgaattgaggaacagaagaagcagagcagatgatcggagcag	CATTTGTTtCTCC	cctcaaatctagaaat-ttagt...87...tggtgatgctgt	atcctgag
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id=54124 gene=ENSG00000113712 name=CSNK1A1 segment=chr5.148876239.148876415.-1 type=E3 VIEW

Figure 672:



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P.Tro	acactg	gt	aagctgaccttg...1352...attccattcatttattttta	TGTA	TTGAT	tc	CTTT	tag	gaagaaaa
P.Abe	acactg	gt	aagctgaccttg...1364...attccattcatttattttta	TGTA	TTGAT	tc	CTTT	tag	gaagaaaa
C.Jac	acactg	gt	aagctgaccttg...1362...attccattcatttattttta	TGTA	TTGAT	tc	CTTT	tag	gaagaaaa
C.Por	acactg	gt	aagctccttatg...1542...tctaaattcatttattttta	TGTA	TTGAT	tc	CTTT	tag	gaagaaaa
O.Cun	acactg	gt	aagttccccttg...1085...tctaaattcatttattttta	TGTA	TTGAT	tc	CTTT	tag	gaagaaaa
C.Fam	acactg	gt	aagcttaccttg...1312...tctaaattcatttattttta	TGTA	TTGAT	tc	CTTT	tag	gaagaaaa
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L.Afr	acactg	gt	aagccgaccttg...1204...tctaaattcatttattttta	TGTA	TTGAT	tc	CTTT	tag	gaagaaaa
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id=469856 gene=ENSG00000143569 name=UBAP2L segment=chr1_154234176_154235578.1 type=IN

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R.Mac	cccctccc	ccatttcctct...37...---tcaagcgggtgcagcacctc	GAAG	ATCAATGCA	cacacctgctgttgcttttg...68...tctttagctaac	tctggcgt
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Figure 673: CS=11.05

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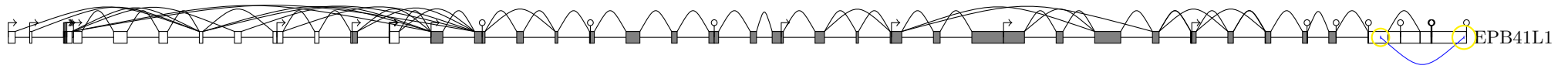
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id=600190 gene=ENSG00000105996 name=HOXA2 segment=chr7_27141085_27141728_-1 type=IN VIEW

Figure 674:



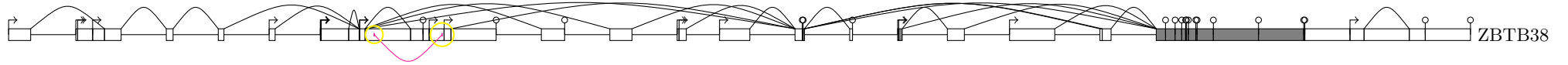
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R. Mac	g aagctga	cattctaaaatt...2381...tgctgtatgcgtgtgctctc	TGTTCTTGATA	ctcaataaaagt	gaaataaatgtg	tttgatgctgaaccat--a	cttccttg
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	*	****	** * ** *	*****	*****	*****	* * *

id=644768 gene=ENSG0000088367 name=EPB41L1 segment=chr20_34818264_34820721_1 type=E3 VIEW

Figure 675: CS=3.9



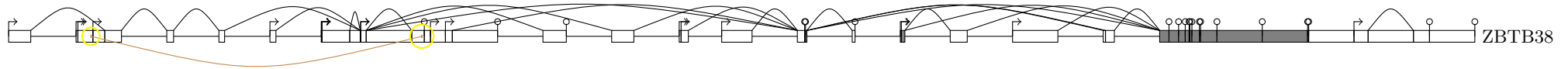
H. Sap	cattaag	gtgagctgtccc...53...-ctg	cgagcctaagatggcag	GCAGGA	TTAG	cc	GTGCTTGT	gc	TGTGTGTGCATG	ctgtgtctagaattcattac	-----	...352...	tttattatgcag	gtaggagg
R. Mac	cattaag	gtgagctgtccc...53...-ctg	cgagcctaagatggcag	GCAGGA	TTAG	cc	GTGCTTGT	gc	TGTGTGTGCATG	ctgtgtctagaattcattac	-----	...349...	tttattatgcag	gtaggagg
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O. Cun	cattaag	gtgagctgtccc...52...-ct	gagcctaagatggcag	GCAGGA	TTAG	cc	GTGCTTGT	gc	TGTGTGTGCGT	gctgtgtatagaattcatt	-----	...355...	tttattatgcag	gtaggagg
C. Fam	cattaag	gtgagctgtccc...54...-ct	gtgagcctaagatggcag	GCAGGA	TTAG	cc	GTGC	-----	tttgtctgtgtgcatgct	-----	...391...	tttattatgcag	gtaggagg	
B. Tau	cattaag	gtgagctgtccc...53...-ct	gtgagcctaagatggcag	CAGGA	TTAG	cc	GTGCTTGT	gc	TGTGTGTGCATGCTGTGTAGAG	aattcattacacgttgcccta344...	tttattatgcag	gtagaagg
E. Cab	cattaag	gtgagctgtccc...53...-ct	gagcctaagatggcag	GCAGGA	TTAG	cc	GTGCTTGT	gc	TGTGTGTGCATG	ctgtgtatagaattcattac	-----	...344...	tttattatgcag	gtaggaga
S. Sus	cattaag	gtgagctgtccc...52...-t	gcagcctaagatggcag	CAGGA	TTAG	cc	GTGC	-----	tggtgctgtgtgcatgct	-----	...376...	tttattatgcag	gtaggagg	
O. Avi	cattaag	gtgagctgtccc...54...-t	gtgagcctaagatggcag	CAGGA	TTAG	cc	GTGCTTGT	gc	TGTGTGTGCATGCTGTGTAGAG	aattcattacacgttgcccta344...	tttattatgcag	gtagaagg
L. Afr	cattaag	gtgagctgtccc...53...-c	gcagcctaagatggcag	GCAGGA	TTAG	cc	GTGC	-----	ttggcgtgtgagcctgct	-----	...358...	tttattatgcag	gtaggagg	
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id=133784 gene=ENSG00000177311 name=ZBTB38 segment=chr3_141105780_141106282_1 type=AN

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R. Mac	ccttggtt	gcagtctcagag...79...-g	ctgttctgcgtatgatttt	-----	TGTGTGTATGTGACAA	att	GCA	-----	TCTAA	aa	CTTGT	gagcaagaagacagagaaatc	agttggtc						
P. Tro	ccttggtt	gcagtctcagaa...79...-g	ctgttctgcgtatgatttt	-----	TGTGTGTATGTGACAA	att	GCA	-----	TCTAA	aa	CTTGT	gagcaagaagacagagaaatc	agttggtc						
P. Abe	ccttggtt	gcagtctcagaa...79...-g	ctgttctgcgtatgatttt	-----	TGTGTGTATGTGACAA	att	GCA	-----	TCTAA	aa	CTTGT	gagcaagaagacagagaaatc	agttggtc						
C. Jac	ccttggtt	gcagtctcagag...79...-g	ctgttctgcgtatgatttt	-----	TGTGTGTATGTGACAA	att	GCA	-----	TCTAA	aa	CTTGT	gagcaagaagacagagaaatc	agttggtc						
M. Mus	ccttggtt	gcagcctcagag...98...-t	tttgggtgtgtgacaatc	-----	GCA	-----	TCTAA	aa	CTTGT	gagcaagaagacagagaaatc	agttggtc		agttggtc						
R. Nor	ccttggtg	gcagcctcagag...98...-t	tttgggtgtgtgacaacc	-----	GCAT	ct	TCTAA	aa	CTTGT	gagcaagaagacagagaaatc	agttggtc		agttggtc						
O. Cun	ccttggtc	gcagcctcagag...81...-c	gttctgcgtgtgattttt	-----	CGTGTGTGTGGCAA	att	GCA	-----	TCTAA	aa	CTTGT	gagtaagaagacagagaaatc	agttggtc						
C. Fam	ccttggtt	gcagcctcagag...98...-t	tttgggtgtgtgacaatt	-----	GCA	-----	TCTAA	aa	CTTGT	gagcaagaagacagagaaatc	agttggtc		agttggtc						
B. Tau	ccttggtt	gcagcctcagag...64...-a	tcacagtacattcaagctg	TTCTGCG	gt	ATGGT	tt	TGTGT	gt	GTGTGACAA	att	GCA	-----	TCTAA	aa	CTTGT	gagcaagaagacagagaaatc	agttggtc	
E. Cab	ccttggtt	gcagcctcagag...79...-a	gctgttctgcgtatgatttt	-----	TGTGTGTGTGTGACAA	att	GCA	-----	TCTAA	aa	CTTGT	gagcaagaagacagagaaatc	agttggtc						
S. Sus	ccttggtt	gcagtctccagag...95...-a	tttgtgtgtgtgacaatt	-----	GCA	-----	TCTAA	aa	CTTGT	gagcaagaagacagagaaatc	agttggtc		agttggtc						
O. Avi	ccttggtt	gcagcctcagag...64...-a	tcacagtacattcaagctg	TTCTGCG	gt	ATGGT	tt	TGTGT	gt	GTGTGACAA	att	GCA	-----	TCTAA	aa	CTTGT	gagcaagaagacagagaaatc	agttggtc	
L. Afr	ccttggtt	gcagcctcagag...95...-t	gattttttgtgtgacaatt	-----	GCA	-----	TCTAA	aa	CTTGT	gagcaagaagacagagaaatc	agttggtc		agttggtc						
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id=133787 gene=ENSG00000177311 name=ZBTB38 segment=chr3_141106489_141106653_1 type=AN VIEW

Figure 676:



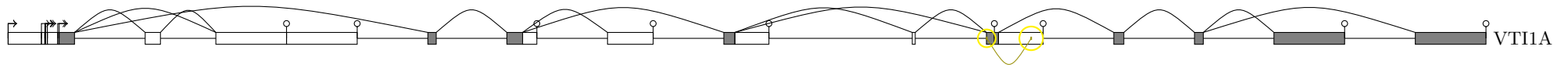
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P. Tro	gaatgttc	tcctggcctgct---.98...	gcgatgactcaggcctggcc	CTGAcGTCAcCCAC	gcccggcactggcctccctct	gaagccag
P. Abe	gaatgttc	tcctggcctgct---.98...	gcgatgactcaggcctggcc	CTGAcGTCAcCCAC	gcccggcactggcctccctct	gaagccag
C. Jac	gaatgttc	tcctggcctgct---.97...	gcgatgactcaggcctggcc	CTGAcGTCAcCCAC	gcccggcactggcctccctct	gaagccag
M. Mus	gaatgtt-	--ctggcctgctgtt..89...	gctatgactcaggcctggcc	CTGAcGTCAcCCAC	ggcttgccactggcctcggtt	gcagccag
R. Nor	gaatgtt-	--ctggcctgctgtt..89...	gctatgactcaggcctggcc	CTGAcGTCAcCCAC	ggcctgtcactggcctcggtt	gcagccag
C. Por	gaatgttc	tcctggcctgct---.91...	gcgatgactcaggcctggcc	CTGAcGTCAcCCAC	gcccggcactggcctccctct	gcagccag
O. Cun	gaatgttc	t-cgggcctgctg---.89...	gcgatgactcaggcctggcc	CTGAcGTCAcCCAC	gcccggcactggcctccctct	gcagccag
C. Fam	gaatgttc	tcctggcctgct---.92...	gcgatgactcaggcctggcc	CTGAcGTCAcCCAC	gcccggcactggcctccctct	gcagccag
F. Cat	gaatgttc	tcctggcctgct---.92...	gcgatgactcaggcctggcc	CTGAcGTCAcCCAC	gcccggcactggcctccctct	gcagccag
B. Tau	gaatgtt-	--ctggcctgctgtt..88...	gcgatgactcaggcctggcc	CTGAcGTCAcCCAC	gcccggcactggcctccctct	gcagccag
E. Cab	gaatgttc	tcctggcctgct---.92...	gcgatgactcaggcctggcc	CTGAcGTCAcCCAC	gcccggcactggcctccctct	gcagccag
S. Sus	gaatgtt-	--ctggcctgctgtt..88...	gcgatgactcaggcctggcc	CTGAcGTCAcCCAC	gcccggcactggcctccctct	gcagccag
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id=133767 gene=ENSG00000177311 name=ZBTB38 segment=chr3_141087166_141087331.1 type=AN

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R. Mac	ttatgcag	gtaggaggcaag...64...	-tattttcaatgctggtatca	GTGGttTGATttTCAG	caaatgtgacagtggcctttgcagtg	gtcagctc
P. Tro	ttatgcag	gtaggaggcaag...64...	-tattttcaatgctggtatca	GTGGttTGATttTCAG	caaatgtgacagtggcctttgcagtg	gtcagctc
P. Abe	ttatgcag	gtaggaggcaag...64...	-tattttcaatgctggtatca	GTGGttTGATttTCAG	caaatgtgacagtggcctttgcagtg	gtcagctc
C. Jac	ttatgcag	gtaggaggcaag...64...	-tattttcaatgctggtatca	GTGGttTGATttTCAG	caaatgtgacagtggcctttgcagtg	gtcagctc
M. Mus	ttatgcag	gtaggaggcaag...62...	-tgtttcagagccggtctca	GTGGttTGATttTCAG	caaatgtgacagtggcctttgcagtg	gtcagctc
R. Nor	ttatgcag	gtaggaggcaag...64...	-tatttcagagccggtctca	GTGGttTGATttTCAG	caaatgtgacagtggcctttgcagtg	gtcagctc
C. Por	ctgtgcag	gtggaggcaag...63...	-tattttcactgctgttacc	GTGGttTGATttTCAG	cagatgtgacagtggcctttgcagtg	gtcagctc
O. Cun	ttatgcag	gtagaaggcaag...63...	gtattttcagtgtgtacc	CGTGGttTGATttTCAG	caaacgtgacagtggcctttgcagtg	gtcagctc
C. Fam	ttatgcag	gtaggaggcaag...63...	-tattttcagtgtgtgtacc	GTGGttTGATttTCAG	caaatgtgacagtggcctttgcagtg	gtcagctc
F. Cat	ttatgcag	gtaggaggcaag...63...	-tattttcagtgtgtgtacc	GTGGttTGATttTCAG	caaatgtgacagtggcctttgcagtg	gtcagctc
B. Tau	ttatgcag	gtagaaggcaag...63...	-tattttcagtgtgtgtacc	GTGGttTGATttTCAG	caaatgtgacagtggcctttgcagtg	gtcagctc
E. Cab	ttatgcag	gtaggagacaag...63...	-tattttcagtgtgtgtacc	GTGGttTGATttTCAG	caaatgtgacagtggcctttgcagtg	gtcagctc
S. Sus	ttatgcag	gtaggaggcaag...63...	-tattttcagtgtgtgtacc	GTGGttTGATttTCAG	caaatgtgacagtggcctttgcagtg	gtcagctc
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Figure 677:



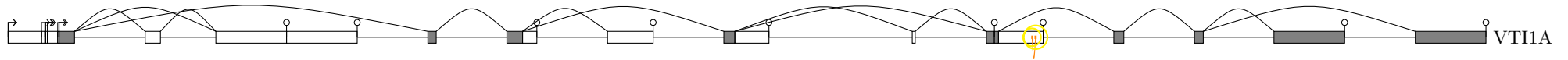
H. Sap	gtgaagag	gtgagtacttcc...4651...-----ctgattttttttccccctt	TTTCTT	TTCAG	Agggcaca	
R. Mac	gtgaagag	gtgagtacttcc...4631...----gtctga-tttttccccccctt	TTTCTT	TTCAG	Agggcaca	
P. Tro	gtgaagag	gtgagtacttcc...4651...----gtctga-tttttttccccctt	TTTCTT	TTCAG	Agggcaca	
P. Abe	gtgaagag	gtgagtacttcc...4618...----tctga-tttttttccccctt	TTTCTT	TTCAG	Agggcaca	
C. Jac	gtgaagag	gtgagtacttcc...4635...----gtctga-tttttttccccctt	TTTCTT	TTCAG	Agggcaca	
C. Por	gtgaagag	gtgagtacttcc...4540...---tgtgtga-tttttttccccctt	TTTCTT	TTCAG	Agggcaca	
O. Cun	gtgaagag	gtgagtacttcc...4502...----gtctga-tttttttccccctt	TTTCTT	TTCAG	Agggcaca	
C. Fam	gtgaagag	gtgagtacttcc...4680...--ccgtctga-tttttttccccctt	TTTCTT	TTCAG	Agggcaca	
F. Cat	gtgaagag	gtgagtacttcc...4945...--ccgtctga-tttttttccccctt	TTTCTT	TTCAG	Agggcaca	
B. Tau	gtgaagag	gtgagtacttcc...4765...--cgtctga-tttttttccccctt	TTTCTT	TTCAG	Agggcaca	
E. Cab	gtgaagag	gtgagtacttcc...4685...--ccgtctga-tttttttccccctt	TTTCTT	TTCAG	Agggcaca	
O. Avi	gtgaagag	gtgagtacttcc...4744...ggtcgtctga-tttttccccctt	TTTCTT	TTCAG	Agggcaca	
L. Afr	gtgaagag	gtgagtacttcc...4696...--ccgtctga-tttttttccccctt	TTTCTT	TTCAG	Agggcaca	
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id=220721 gene=ENSG00000151532 name=VTI1A segment=chr10_114293310_114298004.1 type=IN

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R. Mac	ggaaaccg	gtaagaattctg...186...ctgaggtttaaaagtataca	TCTGAAAAGAGA	tggaatactttgtctaaatt...54...ttgctagcacat	ggtgcagt
P. Tro	ggaaaccg	gtaagaattctg...186...ctgaggtttaaaagtataca	TCTGAAAAGAGA	tggaatactttgtctaaatt...54...ttgctagcacat	ggcgcagt
P. Abe	ggaaaccg	gtaagaattctg...186...ctgaggtttaaaagtataca	TCTGAAAAGAGA	tggaatactttgtctaaatt...54...ttgctagcacat	ggcgcagt
C. Jac	ggaaaccg	gtaagaattctg...186...ctgaggtttaaaagtataca	TCTGAAAAGAGA	tggaatactttgtctaaatt...54...ttgctagcacat	ggcgcagt
C. Por	ggaaaccg	gtaagaattctg...186...ctgaggtttaaaagtataca	TCTGAAAAGAGA	tggaatactttgtctaaatt...54...ttgctagcacac	cgtgcagt
O. Cun	ggaaaccg	gtaagaattctg...186...ctgaggtttaaaagtataca	TCTGAAAAGAGA	tggaatactttgtctaaatt...54...ttgctagcacac	catgccgc
C. Fam	ggaaaccg	gtaagaattctg...186...ctgaggtttaaaagtataca	TCTGAAAAGAGA	tggaatactttgtctaaatt...54...ttgctagcacac	agtcgagt
F. Cat	ggaaaccg	gtaagaattctg...186...ctgaggtttaaaagtataca	TCTGAAAAGAGA	tggaatactttgtctaaatt...54...ttgctggcgcac	ggtgcggt
B. Tau	ggaaaccg	gtaagaattctg...186...ctgaggtttaaaagtataca	TCTGAAAAGAGA	tggaatactttgtctaaatt...54...ttgctggcgcac	cgtgctgt
E. Cab	ggaaaccg	gtaagaattctg...186...ctgaggtttaaaagtataca	TCTGAAAAGAGA	tggaatactttgtctaaatt...54...ttgctagcacac	agcgcctg
O. Avi	ggaaaccg	gtaagaattctg...186...ctgaggtttaaaagtataca	TCTGAAAAGAGA	tggaatactttgtctaaatt...54...ttgctagcacac	agtgctgt
L. Afr	ggaaaccg	gtaagaattctg...186...ctgaggtttaaaagtataca	TCTGAAAAGAGA	tggaatactttgtctaaatt...54...ttgctagcacac	agtgccgt
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id=220724 gene=ENSG00000151532 name=VTI1A segment=chr10_114298090_114298405.1 type=AN VIEW

Figure 678: CS=7.8



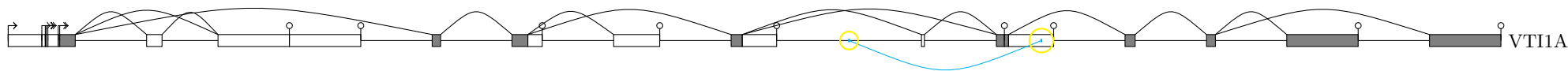
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C.Jac	ggaaaccg	gtaagaattctg...192...tttaaag	tatacatctgaa	AAGAGATGGAAT	actttgtctaaattctacat...48...tgctagcacat	ggcgc	cagt
C.Por	ggaaaccg	gtaagaattctg...192...tttaaag	tatacatctgaa	AAGAGATGGAAT	actttgtctaaattctacat...48...tgctagcacac	cgtgc	cagt
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E.Cab	ggaaaccg	gtaagaattctg...192...tttaaag	tatacatctgaa	AAGAGATGGAAT	actttgtctaaattctacat...48...tgctagcacac	agcgc	cgt
O.Avi	ggaaaccg	gtaagaattctg...192...tttaaag	tatacatctgaa	AAGAGATGGAAT	actttgtctaaattctacat...48...tgctagcacac	agtgc	tgt
L.Afr	ggaaaccg	gtaagaattctg...192...tttaaag	tatacatctgaa	AAGAGATGGAAT	actttgtctaaattctacat...48...tgctagcacac	agtgc	ggc
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id=220724 gene=ENSG00000151532 name=VTI1A segment=chr10_114298090_114298405.1 type=AN

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R.Mac	ggaaaccg	gtaagaattctg...215...agatgga	aactttgtctaa	ATTCTa	CATT	gTCTT	aatatgcagttacatg	ttgtcagtttaccaccgc	aatgattgctagcacat	ggtgc	cagt
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O.Avi	ggaaaccg	gtaagaattctg...215...agatgga	aactttgtctaa	ATTCTa	CATT	gTCTT	aatatgcagttacatg	ttgtcagtttaccaccgc	aatgattgctagcacac	agtgc	tgt
L.Afr	ggaaaccg	gtaagaattctg...215...agatgga	aactttgtctaa	ATTCTa	CATT	gTCTT	aatatgcagttacatg	ttgtcagtttaccaccgc	aatgattgctagcacac	agtgc	ggc
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	**	**

id=220724 gene=ENSG00000151532 name=VTI1A segment=chr10_114298090_114298405.1 type=AN VIEW

Figure 679:



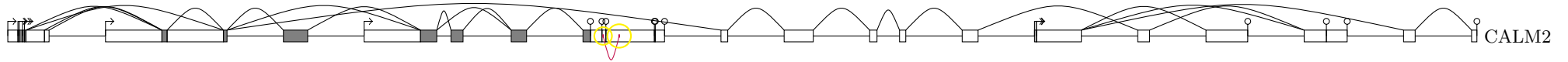
H.Sap	cttttctt	tattatttagta..4663..-tctttataatatagacttct	ATGAAGTcGTTCCc	CTTTaTTTCA	GATGGTGTc	TTAGAT	gtactttaaaagagaatttc...222...ttcatgttgcag	ttgataaa
R.Mac	cttttctt	tattatttagta..4663..-tctttataatatagacttct	ATGAAGTcGTTCCc	CTTTaTTTCA	GATGGTGTc	TTAGAT	gtactttaaaagaggatttc...222...ttcatgttgcag	ttgataaa
P.Tro	cttttctt	tattatttagta..4663..-tctttataatatagacttct	ATGAAGTcGTTCCc	CTTTaTTTCA	GATGGTGTc	TTAGAT	gtactttaaaagagaatttc...222...ctcatgttgcag	ttgataaa
P.Abe	cttttctt	tattatttagta..4509..-tctttataatatagacttct	ATGAAGTcGTTCCc	CTTTaTTTCA	GATGGTGTc	TTAGAT	gtactttaaaagagaatttc...376...ttcatgttgcag	ttgataaa
C.Jac	cttttctt	tattatttagta..4663..-tctttataatatagacttct	ATGAAGTcGTTCCc	CTTTaTTTCA	GATGGTGTc	TTAGAT	gtactttaaaagagaatttc...222...ttcatgttgcag	ttgataaa
C.Por	cttttctt	tattatttagta..4664..-tctttataatatagacttct	ATGAAGTcATTCCc	CTTTaTTTCA	GATGGTGTc	TTAGAT	gtactttaaaagagaatttc...221...ttcatgttgcag	ttgataaa
O.Cun	cttttctt	tattatttagta..4675..actcctatgaagtcg-ctccc-----	CTTTaTTTCA	GATGGTGTc	TTAGAT	gtactttaaaagagaatttc...224...ttcatgttgcag	ttgataaa	
C.Fam	cttttctt	tattatttagta..4662..-tctttataatatagacttct	ATGAAGcGTTCCc	CTTTaTTTCA	GATGGTGTc	TTAGAT	gtactttaaaagagaatttc...223...ttcatgttgcag	ttgataaa
F.Cat	cttttctt	tattatttagta..4656..-tctttataatatagacttct	ATGAAGTcGTTCCc	CTTTaTTTCA	GATGGTGTc	TTAGAT	gtactttaaaagagaatttc...229...ttcatgttgcag	ttgataaa
B.Tau	cttttctt	tattatttagta..4656..-tctttataatatagacttct	ATGAAGTcGTTCCc	CTTTaTTTCA	GATGGTGTc	TTAGAT	gtactttaaaagagaatttc...229...ttcatgttgcag	ttggtaaa
E.Cab	cttttctt	tattatttagta..4661..-tctttataatatagacttct	ATGAAGTcGTTCCc	CTTTaTTTCA	GATGGTGTc	TTAGAT	gtactttaaaagagaatttc...224...ttcatgttgcag	ttgataaa
O.Avi	cttttctt	tattatttagta..4658..-tctttataatatagacttct	ATGAAGTcGTTCCc	CTTTaTTTCA	GATGGTGTc	TTAGAT	gtactttaaaagagaatnmm...227...ttcatgttgcag	ttgataaa
L.Afr	cttttctt	tattatttagta..4660..-tctttataatatagacttct	ATGAAGTcGTTCCc	CTTTaTTTCA	GATGGTGTc	TTAGAT	gtactttaaaagagaatttc...225...ttcgtgttgcag	ttgataaa
	* *****	*****	*** * * * * *	*****	*****	*****	** *****	*** ****

id=220719 gene=ENSG00000151532 name=VTI1A segment=chr10_114287165_114293288.1 type=IN

H.Sap	ggaaacgg	gtaagaattctg..171...tactgaaaacagttcctgag	GTTTAAaaGTATa	CATCTGAAAAGAGat	GGAATACTTTGT	ctaaattctacatttgtct---t...41...ttgctagcacat	ggcgcaat	
R.Mac	ggaaacgg	gtaagaattctg..171...tactgaaaacagttcctgag	GTTTAAaaGTATa	CATCTGAAAAGAGat	GGAATACTTTGT	ctaaattctacatttgtct---t...41...ttgctagcacat	ggtgcagt	
P.Tro	ggaaacgg	gtaagaattctg..171...tactgaaaacagttcctgag	GTTTAAaaGTATa	CATCTGAAAAGAGat	GGAATACTTTGT	ctaaattctacatttgtct---t...41...ttgctagcacat	ggcgcaat	
P.Abe	ggaaacgg	gtaagaattctg..171...tactgaaaacagttcctgag	GTTTAAaaGTATa	CATCTGAAAAGAGat	GGAATACTTTGT	ctaaattctacatttgtct---t...41...ttgctagcacat	ggcgcaat	
C.Jac	ggaaacgg	gtaagaattctg..171...tactgaaaacagttcctgag	GTTTAAaaGTATa	CATCTGAAAAGAGat	GGAATACTTTGT	ctaaattctacatttgtct---t...41...ttgctagcacat	ggcgcaat	
C.Por	ggaaacgg	gtaagaattctg..171...tactgaaaacagttcctgag	GTTTAAaaGTATa	CATCTGAAAAGAGat	GGAATACTTTGT	ctaaattctacatttgtct---t...41...ttgctagcacac	cgtgcagt	
O.Cun	ggaaacgg	gtaagaattctg..171...tactgaaaacagttcctgag	GTTTAAaaGTATa	CATCTGAAAAGAG	-----atggaatac---tttgtctaaat...55...ttgctagcacac	catgcccgc		
C.Fam	ggaaacgg	gtaagaattctg..171...tactgaaaacagttcctgag	GTTTAAaaGTATa	CATCTGAAAAGAGat	GGAATaCTTTGT	ctaaattctacatttgtct---t...41...ttgctagcacac	agtgcaat	
F.Cat	ggaaacgg	gtaagaattctg..171...taccgaaaacagttcctgag	GTTTAAaaGTATa	CATCTGAAAAGAGat	GGAATACTTTGT	ctaaattctacatttgtct---t...41...ttgctggcgcac	ggtgcccgc	
B.Tau	ggaaacgg	gtaagaattctg..171...tactgaaaacagttcctgag	GTTTAAaaGTATa	CATCTGAAAAGAGat	GGAATACTTTGT	ctaaattctacatttgtct---t...41...ttgctggcgcac	cgtgctgt	
E.Cab	ggaaacgg	gtaagaattctg..171...tactgaaaacagttcctgag	GTTTAAaaGTATa	CATCTGAAAAGAGat	GGAATACTTTGT	ctaaattctacatttgtct---t...41...ttgctagcacac	agcgccgt	
O.Avi	ggaaacgg	gtaagaattctg..171...tactgaaaacagttcctgag	GTTTAAaaGTATa	CATCTGAAAAGAGat	GGAATACTTTGT	ctaaattctacatttgtct---t...41...ttgctagcacac	agtgctgt	
L.Afr	ggaaacgg	gtaagaattctg..171...tactgaaaacagttcctgag	GTTTAAaaGTATa	CATCTGAAAAGAGat	GGAATACTTTGT	ctaaattctacatttgtct---t...41...ttgctagcacac	agtgcccgc	
	*****	*****	*** *****	*****	* * *	***** *	***** **	**

id=220724 gene=ENSG00000151532 name=VTI1A segment=chr10_114298090_114298405.1 type=AN VIEW

Figure 680:



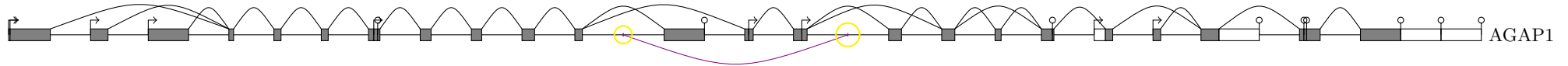
H. Sap	ttccTCCA	TGTTTCTTC	-ccttatccttactgtcattgtcctaa	aaccttat
R. Mac	ttccTCCA	TGTTTCTTC	-ccttatccttactgtcattgtcctga	aaccttat
P. Tro	ttccTCCA	TGTTTCTTC	-ccttatccttactgtcattgtcctaa	aaccttat
P. Abe	ttccTCCA	TGTTTCTTC	-ccttatccttactgtcattgtcctaa	aaccttat
M. Mus	ttccTCCA	TGTTTCTTC	-ccttatccttactgtcattgtcctta	aaccttat
C. Por	ttccTCCA	TGTTTCTTC	-ccttatccttactgtcattgtcctga	aaccttat
O. Cun	ttccTCCA	TGTTTCTTC	-ccttatccttactgtcattgtcctga	aaccttat
C. Fam	ttccTCCA	TGTTTCTTC	-ccttatccttactgtcattgtcctga	aaccttat
F. Cat	ttccTCCA	TGTTTCTTC	-ccttatccttactgtcattgtcctga	aaccttat
B. Tau	ttccTCCA	TGTTTCTTC	-ccttatccttactgtcattgtcctga	aaccttat
E. Cab	ttccTCCA	TGTTTCTTC	-ccttatccttactgtcattgtcctga	aaccttat
S. Sus	ttccTCCA	TGTTTCTTC	-ccttatccttactgtcattgtcctga	aaccttat
L. Afr	ctccTCCA	TGTTTCTTC	-ccttatccttactgtcattgtcctga	aaccttat
	*****	*****	* *****	*****

id=578897 gene=ENSG00000143933 name=CALM2 segment=chr2.47387741_47387775_-1 type=AN

H. Sap	tgtcctaa	aaccttatttta...71...ttagatggagttggtcaaat	GAGGGAACATc	TGGG	ttagccttttttaaagtag-...280...aaaaattacaa-t	ttacccaa
R. Mac	tgtcctga	aaccttatttta...71...ttagatggagttggtcaaat	GAGGGAACATc	TGGG	ttagccttttttaaagtag-...280...aaaaattacaa-t	ttacccaa
P. Tro	tgtcctaa	aaccttatttta...71...ttagatggagttggtcaaat	GAGGGAACATc	TGGG	ttagccttttttaaagtag-...280...aaaaattacaa-t	ttacccaa
P. Abe	tgtcctaa	aaccttatttta...70...ttagatggagttggtcaaat	GAGGGAACATc	TGGG	ttagccttttttaaagtag-...280...aaaaattacaa-t	ttacccaa
M. Mus	tgtcctta	aaccttatttta...71...ttagatggagttggtcaaat	GAGGGAACATc	TGGG	ttagccttttttaaagtag-...281...aaaaattacaa-t	ttacccaa
C. Por	tgtcctga	aaccttatttta...71...ttagatggagttggtcaaat	GAGGGAACATc	TGGG	ttagccttttttaaagtag-...285...aaaaattacaa-t	ttacccaa
O. Cun	tgtcctga	aaccttatttta...70...ttagatggagttggtcaaat	GAGGGAACATc	TGGG	ttagccttttttaaagtag-...285...aaaaattacaa-t	ttacccaa
C. Fam	tgtcctga	aaccttatttta...71...ttagatggagttggtcaaat	GAGGGAACATc	TGGG	ttagccttttttaaagtag-...285...aaaaattacaa-t	ttacccaa
F. Cat	tgtcctga	aaccttatttta...71...ttagatggagttggtcaaac	GAGGGAACATc	TGGG	ttagccttttttaaagtag-...286...aaaaattacaa-t	ttacccaa
B. Tau	tgtcctga	aaccttatttta...71...ttagatggagttggtcaaat	GAGGGAACATc	TGGG	ttagccttttttaaagtag-...295...aaaaattacaa-t	ttacccaa
E. Cab	tgtcctga	aaccttatttta...71...ttagatggagttggtcaaat	GAGGGAACATc	TGGG	ttagccttttttaaagtag-...288...-aaaattacaatt	ttacccaa
S. Sus	tgtcctga	aaccttatttta...71...ttagatggagttggtcaaat	GAGGGAACATc	TGGG	ttagccttttttaaagtag-...289...aaaaattacaa-t	ttacccaa
L. Afr	tgtcctga	aaccttatttta...71...ttagatggagttggtcagat	GAGGGAACATc	TGGG	ttagccttttttaaagtag-...281...aaaaattacaa-t	gtacccaa
	*****	*****	*** *****	*****	*****	*****

id=578898 gene=ENSG00000143933 name=CALM2 segment=chr2.47387311_47387740_-1 type=AN VIEW

Figure 681:



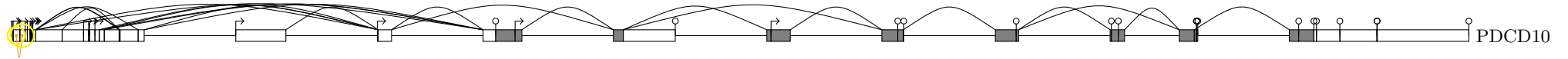
H.Sap	ttaaacag	gt-gagcagcctc...4836...	gccgtcagtc	caag-ttttatc	TCTTAAt	GAATag	AGACT	tgctgaagtaagggttaggt...72...	ttctctccccag	ggcctgcc
R.Mac	ttaaacag	gt-gagcagcatc...4836...	gccgtcagtc	caag-ttttatc	TCTTAAt	GAATag	AGACT	tgctgaagtaagggttaggt...72...	ttctgtccccag	ggcctgcc
P.Tro	ttaaacag	gt-gagcagcctc...4836...	gccgtcagtc	caag-ttttatc	TCTTAAt	GAATag	AGACT	tgctgaagtaagcggttaggt...72...	ttctctccccag	ggcctgcc
C.Jac	ttaaacag	gt-gagcagcatc...4836...	gccgtcagtc	caag-ttttatc	TCTTAAt	GAATag	AGACT	tgctgaagtaagggttaggt...72...	ttctctccccag	ggcctgcc
M.Mus	ttaaacag	gt-acactgttcc...4836...	gctgccagtc	caag-ttttatc	TCTTAAt	GAATag	AGACT	tgctgaagtaagggttaggt...72...	ttctctccccag	ggcctgcc
R.Nor	ttaaacag	gt-acactgttcc...4835...	gctgccagtc	caag-ttttatc	TCTTAAt	GAATag	AGACT	tgctgaagtaagggttaggt...73...	ttctctccccag	ggcctgcc
C.Por	ttaaacag	gt-acatgggtccc...4835...	gccgtcagtc	caag-ttttatc	TCTTAAt	GAATag	AGACT	tgctgaagtaagggttaggt...73...	ttcttccccag	ggcttgcc
O.Cun	ttaaacag	gt-acgccgcgcc...4834...	gccgtcagtc	caag-ttttatc	TCTTAAt	GAATag	AGACT	tgctgaagtaagggttaggt...74...	tcctctccccag	ggcctgcc
F.Cat	ttaaacag	gt-acgccgtttc...4830...	gccgtcagtc	caag-ttttatc	TCTTAAt	GAATag	AGACT	tgctgaagtaagggttaggt...78...	ctctctccccag	ggcctgcc
B.Tau	ttaaacag	gtaacgcggct-c...4821...	gccgtcagtc	caag-ttttatc	TCTTAAt	GAATag	AGACT	tgctgaagtaagggttaggt...87...	ttctctccccag	ggcctgcc
E.Cab	ttaaacag	gt-acgctgtttc...4835...	gccgtcagtc	caag-ttttatc	TCTTAAt	GAATag	AGACT	tgctgaagtaaggatttaggt...73...	ttctctccccag	ggcctgcc
S.Sus	ttaaacag	gt-acgtgcttcc...4835...	ccgtcagtc	caag-tttttctc	TCTTAAt	GAATag	AGACT	tgctgaagtaagggttaggt...73...	ttctctccccag	ggcctgcc
L.Afr	ttaaacag	gt-atgcggtgc...4835...	gcagccagtc	caag-ttttatc	TCTTAAt	GAATag	AGACT	tgctgaagtaagggttaggt...73...	ctttctccccag	ggcctgctc
	*****	**	*		* * *****	****	*****		* *****	** * * *

id=455727 gene=ENSG00000157985 name=AGAP1 segment=chr2_236715976_236761329_1 type=IN

H.Sap	caattcag	gtaagcttacag...4945...	cggtggtgttc	caactgactt	GTTTATTCc	TAG	GGaatgtc
R.Mac	caattcag	gtaagcttacag...4945...	cggtggtgttc	caactgactt	GTTTATTCc	TAG	GGaatgtc
P.Tro	caattcag	gtaagcttacag...4945...	cggtggtgttc	caactgactt	GTTTATTCc	TAG	GGaatgtc
C.Jac	caattcag	gtaagcttacag...4945...	cggtggtgttc	caactgactt	GTTTATTCc	TAG	GGaatgtc
M.Mus	aaattcag	gtaagctcacag...4945...	gcgtggtgttc	caactgactt	GTTTATTCc	TAG	GGaatgtc
R.Nor	aaattcag	gtaagctcacag...4945...	gcgtggtgttc	caactgactt	GTTTATTCc	TAG	GGaatgtc
C.Por	gaactcag	gtaagccggcag...4945...	ccgtggtgttc	caactgactt	GTTTATTCc	TAG	GGaatgtc
O.Cun	caattcag	gtaagctcacag...4945...	cggtggtgttc	caccactt	GTTTATTCc	TAG	GGaatgtc
F.Cat	aaattcag	gtaagctcacag...4945...	aggtggtgttc	caactgactt	GTTTATTCc	TAG	GGaatgtc
B.Tau	gaattcag	gtaagctcacag...4945...	cgctggtgttc	caactgactt	GTTTATTCc	TAG	GGagtgtc
E.Cab	aaattcag	gtaagcttacag...4945...	cggtggtgttc	caactgactt	GTTTATTCc	TAG	GGaatgtc
S.Sus	aaattcag	gtaagcgtatgg...4945...	cggtggtgttc	caactgactt	GTTTATTCc	TAG	GGaatgtc
L.Afr	taattcag	gtaagcgtacaa...4945...	cggtggtgttc	caactgactt	GTTTATTCc	TAG	GGcatgtc
	** ** ** *	*****			**** * * *	*****	** ** ** *

id=455735 gene=ENSG00000157985 name=AGAP1 segment=chr2_236817551_236839408_1 type=IN VIEW

Figure 682: CS=19.76



```

R. Mac   gcgactccgGCTGGGcAGGAATCCGGacaacgcctggttcctctcgggtcctt
P. Tro   gcgactccTGCTGGGcAGGAATCCGGacaacgcctggttcctctcgggtcctt
P. Abe   gcgactccgGCTGGGcAGGAATCCGGacaacgcctggttcctctcgggtcctt
C. Jac   gcgactccgGCTGGGcAGGAATCCGGacaacgcctggttcctctcgggtcctt
M. Mus   gcgactccTGCTGGGcAGGAATCCGGacaacgcctggttcctctcgggtcctt
C. Por   gcgattccgGCTGGGcAGGAATCCGGacaacgcctggttcctctcgggtcctt
O. Cun   gcCTCTcCGGCTGGGcAGGAATCCGGacaacgcctggttcctctcgggtcctt
F. Cat   gcgactccgGCTGGGcAGGAATCCGGacaacgcctggttcctctcgggtcctt
B. Tau   gcgactccgGCTGGGcAGGAATCCGGacaacgcctggttcctctcgggtcctt
E. Cab   gcgactccgGCTGGGcAGGAATCCGGacaacgcctggttcctctcgggtcctt
S. Sus   gcgactccgGCTGGGcAGGAATCCGGacaacgcctggttcctctcgggtcctt
O. Avi   gcgactccgGCTGGGcAGGAATCCGGacaacgcctggttcctctcgggtcctt
L. Afr   gcgactccgGCTGGGcAGGAATCCGGacaacgcctggttcctctcgggtcctt
**      *** *****

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id=798422 gene=ENSG00000114209 name=PDCD10 segment=chr3_167452681_167452717_-1 type=EN

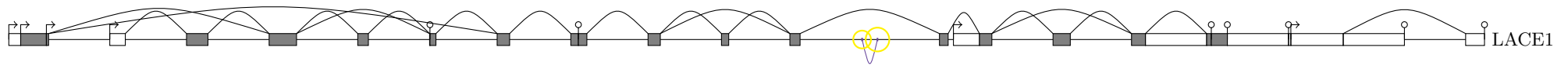
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R. Mac   ttcctcTCGGGTCCTTCCGGCgtcgccggagtgaattgatccggg
P. Tro   ttcctcTCGGGTCCTTCCGGCgtcgccggagtgaattgatccggg
P. Abe   ttcctcTCGGGTCCTTCCGGCgtcgccggagtgaattgatccggg
C. Jac   ttcctcTCGGGTCCTTCCGGCgtcgccggagtgaattgatccggg
M. Mus   ttcctTCGGGTCCTTCCGGCgtcgccggagtgaattgatccggg
C. Por   ttcctcTCGGGTCCTTCCGGCgtaaccggagtgaattgatccggg
O. Cun   ttcctcTCGGGTCCTTCCGGcGTCCcGGAGtgaattgatccggg
F. Cat   ttcctcTCGGGTCCTTCCGGCgtcgccggagtgaattgatccggg
B. Tau   ttcctcTCGGGTCCTTCCGGCgtcgccggagtgaattgatccggg
E. Cab   ttcctcTCGGGTCCTTCCGGCgtcgccggagtgaattgatccggg
S. Sus   ttcctcTCGGGTCCTTCCGGCgtcgccggagtgaattgatccggg
O. Avi   ttcctcTCGGGTCCTTCCGGCgtcgccggagtgaattgatccggg
L. Afr   ttcctcTCGGGTCCTTCCGGCgtcgccggagtgaattgatccggg
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id=798423 gene=ENSG00000114209 name=PDCD10 segment=chr3_167452652_167452680_-1 type=EN VIEW

Figure 683:



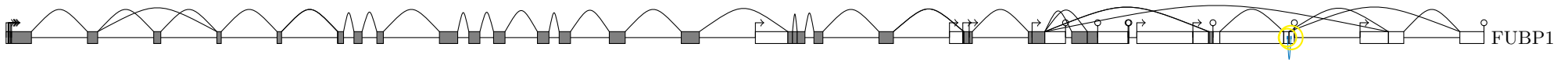
H. Sap	tactacct	gtaagtgtttct...4626...-atgcttgactgccttgctc	TTTGcTCTTGt	TTTGCATGCAaGAGAGAgccagaag-ctttcttctcat...271...ttttcactgtag	cacaagtg
R. Mac	tactacct	gtaagtgttttt...4623...-atgcttgactgccttgctc	TTTGcTCTTGt	TTTGCATGCAaGAGAGAgccagaag-ctttcttctcat...274...ttttcactgtag	cacaagtg
P. Abe	tactacct	gtaagtgttttt...4626...-atgcttgactgccttgctc	TTTGcTCTTGt	TTTGCATGCAaGAGAGAgccagaag-ctttcttctcat...271...ttttcactgtag	cacaagtg
C. Jac	tactacct	gtaagtgttttt...4626...-atgcttgactgccttgctc	TTTGcTCTTGt	TTTGCATGCAaGAGAGAgccagaag-ctttcttctcat...271...ttttcactgtag	cacaagtg
M. Mus	tactacct	gtaagtgttctc...4625...-atgcttgactgccttgctc	TTTGcTCTTGt	TTTGCATGCAaGAGAGAgccagaag-ctttcttctcat...272...ttttcactgtag	cacaagtg
C. Por	tactatct	gtaagtttgtgt...4625...gatgcttgactgccttgctc	ATTTCgTCTTGt	TTTGCATGCAgGAGAGAgccagaag-ctttcttctcat...271...ttttcactgtag	cacaagtg
O. Cun	tactacct	gtaagtagcttt...4607...gatgcttgactgccttgctc	ATTTCgTCTTGt	TTTGCATGCAgGAGAGAgccagaag-ctttcttctcat...289...ttttcactgtag	cacaagtg
C. Fam	tactatct	gtaagtttctct...4624...-atgcttgactgccttgctc	TTTGcTCTTGt	TTTGCATGCAaGAGAGAgccagaagcctttcttctca...273...ttttcactgtag	cacaagtg
F. Cat	tactatct	gtaagtttctta...4625...-atgcttgactgccttgctc	TTTGcTCTTGt	TTTGCATGCAaGAGAGAgccagaagcctttcttctca...272...ttttcactgtag	cacaagtg
B. Tau	tactacct	gtaagttttttt...4626...-atccttgactgccttgctc	TTTGcTCTTGt	TTTGCATGCAaGAGAGAgccagaagcctttcttctca...271...ttttcactgtag	cacaagtg
E. Cab	tactacct	gtaagttttgtca...4625...-atgcttgactgccttgctc	TTTGcTCTTGt	TTTGCATGCAaGAGAGAgccagaagcctttcttctca...272...ttttcactgtag	cacaagtg
S. Sus	tactacct	gtaagtgtattt...4625...-atgcttgactgccttgctc	TTTGcTCTTGt	TTTGCATGCAaGAGAGAgccagaagcctttcttctca...272...ttttcactgtag	cacaagtg
L. Afr	tattacct	gtaagttttctt...4625...-atgcttgactgccttgctc	TTTGcTCTTGt	TTTGCATGCAaGAGAGAgccag-agcctttcttctcat...272...ttttcactgtag	cacaagtg
** ** *	*****	** *****	*****	*****	*****

id=743952 gene=ENSG00000135537 name=LACE1 segment=chr6_108768500_108798067_1 type=IN

H. Sap	tactacct	gtaagtgtttct...4748...aacagctagaagcacagaag	TCTTTCag	TGTATGCAAATAAGGCAGAtcatctacctgagagtaa--...150...ttttcactgtag	cacaagtg
R. Mac	tactacct	gtaagtgttttt...4745...aacagctagaagcacagaag	TCTTTCag	TGTATGCAAATAAGGCAGAtcatctacctgagagtaa--...153...ttttcactgtag	cacaagtg
P. Abe	tactacct	gtaagtgttttt...4748...aacagctagaagcacagaag	TCTTTCag	TGTATGCAAATAAGGCAGAtcatctacctgagagtaa--...150...ttttcactgtag	cacaagtg
C. Jac	tactacct	gtaagtgttttt...4748...aacagctagaagcacagaag	TCTTTCag	TGTATGCAAATAAGGCAGAtcatctacctgagagtaa--...150...ttttcactgtag	cacaagtg
M. Mus	tactacct	gtaagtgttctc...4747...aacatctagaagctcagaag	TCTTTCaa	TGTATGCAAATAAGGCAGAtcatctacctgagagtaa--...151...ttttcactgtag	cacaagtg
C. Por	tactatct	gtaagtttgtgt...4748...aaaggagagaagcacagaag	TCTTTCag	TGTATGCAAATAAGGCAGAcacctatctgagagtaata...148...ttttcactgtag	cacaagtg
O. Cun	tactacct	gtaagtagcttt...4730...aacagctagaagcacagaag	TCTTTCag	TGTATGCAAATAAGGCAGAcacctacctgagagtaata...166...ttttcactgtag	cacaagtg
C. Fam	tactatct	gtaagtttctct...4747...aacagccagaagcacagaag	TCTTTCag	TGTATGCAAATAAGGCAGAtcatctacctgagagtaa--...151...ttttcactgtag	cacaagtg
F. Cat	tactatct	gtaagtttctta...4748...aacagccagaagcacagaag	TCTTTCag	TGTATGCAAATAAGGCAGAtcatctacctgagagtaa--...150...ttttcactgtag	cacaagtg
B. Tau	tactacct	gtaagttttttt...4749...aacagccagaagcacagaag	TCTTTCag	TGTATGCAAATAAGGCAGAtcatctacctgagagtaa--...149...ttttcactgtag	cacaagtg
E. Cab	tactacct	gtaagtttgtca...4748...aacagccagaagcacagaag	TCTTTCag	TGTATGCAAATAAGGCAGAtcatctacctgagagtaa--...150...ttttcactgtag	cacaagtg
S. Sus	tactacct	gtaagtgtattt...4748...aacagccagaagcacagaag	TCTTTCag	TGTATGCAAATAAGGCAGAtcatctacctgagagtaa--...150...ttttcactgtag	cacaagtg
L. Afr	tattacct	gtaagttttctt...4747...aacagctagaagcacagaag	TCTTTCag	TGTATGCAAATAAGGCAGAtcatctacctgagagtaa--...151...ttttcactgtag	cacaagtg
** ** *	*****	** *****	*****	*****	*****

id=743952 gene=ENSG00000135537 name=LACE1 segment=chr6_108768500_108798067_1 type=IN VIEW

Figure 684:



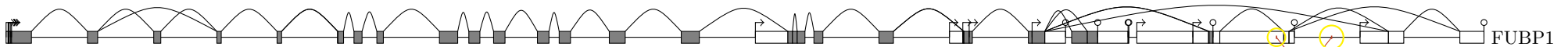
H.Sap	cttcacag	tgccttcccagaccttcca	CCTTAGGTTc	TGCT	gcaaaaagcaccag	gtaagcac
R.Mac	cttcacag	tgccttcccagaccttcca	CCTTAGGTTc	TGCT	gcaaaaagcaccag	gtaagcac
P.Tro	cttcacag	tgccttcccagaccttcca	CCTTAGGTTc	TGCT	gcaaaaagcaccag	gtaagcac
P.Abe	cttcacag	tgccttcccagaccttcca	CCTTAGGTTc	TGCT	gcaaaaagcaccag	gtaagcac
C.Jac	cttcacag	tgccttcccagaccttcca	CCTTAGGTTc	TGCT	gcaaaaagcaccag	gtaagcac
M.Mus	cttcacag	tgccttcccagaccttcca	CCTTAGGTTc	TGCT	gcaaaaagcaacag	gtaagcac
C.Por	cttcacag	tgccttcccagaccttcca	CCTTAGGTTc	TGCT	gcaaaaagcaccag	gtaagcac
O.Cun	cttcacag	tgccttcccagaccttcca	CCTTAGGTTc	TGCT	gc-aaaagcaacag	gtaagcac
C.Fam	cttcacag	tgccttcccagaccttcca	CCTTAGGTTc	TGCT	gcaaaaagcaacag	gtaagcac
B.Tau	cttcacag	tgccttcccagaccttcca	CCTTAGGTTc	TGCT	gcaaaaagcaacag	gtaagcac
E.Cab	cttcacag	tgccttcccagaccttcca	CCTTAGGTTc	TGCT	gcaaaaagcaacag	gtaagcac
S.Sus	cttcacag	tgccttcccagatcttcca	CCTTAGGTcc	TGCT	gcaaaaagcaacag	gtaagcac
O.Avi	cttcacag	tgccttcccagaccttcca	CCTTAGGTTc	TGCT	gcaaaaagcaacag	gtaagcac
L.Afr	cttcacag	tgccttcccagaccttcca	CCTTAGGTTc	TGCT	gcaaaaagcaacag	gtaagcac
	*****	*****	*****	*****	*****	*****

id=462829 gene=ENSG00000162613 name=FUBP1 segment=chr1_78412215-78412261_-1 type=AN

H.Sap	agcaccag	gtaAGCAcAACCTAAGG	acatatataaataaatatttcaatacattaa	tgttgtcc
R.Mac	agcaccag	gtaAGCAcAACCTAAGG	acatatataaataaatatttcagtacattaa	tgttgtcc
P.Tro	agcaccag	gtaAGCAcAACCTAAGG	acatatataaataaatatttcagtacattaa	tgttgtcc
P.Abe	agcaccag	gtaAGCAcAACCTAAGG	acatatataaataaatatttcagtacattaa	tgttgtcc
C.Jac	agcaccag	gtaAGCAcAACCTAAGG	acatatataaataaatatttcagtacattaa	tgttgtcc
M.Mus	agcaacag	gtaAGCAcAACCTAAGG	ccatctctatataaataatatacagtacatata	tgttgtcc
C.Por	agcaccag	gtaAGCAcAACCTAAGG	acatatataaataaatatttcagtacattaa	tgttgtcc
O.Cun	agcaacag	gtaAGCAcAACCTAAGG	acatatataaataaatatttcagtacattaa	tgttgtcc
C.Fam	agcaacag	gtaAGCAcAACCTAAGG	acatatataaataaatatttcagtacattaa	tgttgtcc
B.Tau	agcaacag	gtaAGCAcAACCTAAGG	acatatataaataaatatttcagtacattaa	tgttgtcc
E.Cab	agcaacag	gtaAGCAcAACCTAAGG	acatatataaat-aatatttcagtacattaa	tgttgtcc
S.Sus	agcaacag	gtaAGCAcaACCTAAGG	acatatatagtaaataacttcagtacattaa	tgttgtcc
O.Avi	agcaacag	gtaAGCAcAACCTAAGG	acatatataaataaatatttcagtacattaa	tgttgtcc
L.Afr	agcaacag	gtaAGCAcAACCTAAGG	aaatatataaataaatatttcagtacattaa	tgttgtcc
	**** **	*****	** * * * **** ** *	*****

id=462830 gene=ENSG00000162613 name=FUBP1 segment=chr1_78412167-78412214_-1 type=AN VIEW

Figure 685:



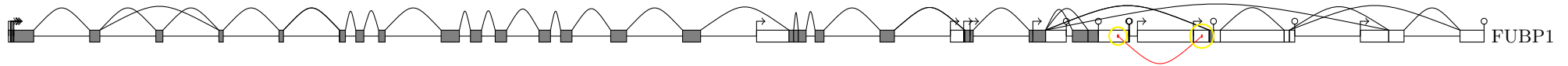
H. Sap	attgcact	gtaagtacatca...763...ttcagtatcataattcacaa	ATTGGAGGCTGTTGATTTT	gattcatttaagggttataaaa	---...30...tatacttcacag	tgccctcc
R. Mac	attgcact	gtaagtacatca...759...ttcagtatcataactcacaa	ATTGGAGGCTGTTGATTTT	gattcatttaagggttataaaa	---...30...tatacttcacag	tgccctcc
P. Tro	attgcact	gtaagtacatca...763...ttcagtatcataactcacaa	ATTGGAGGCTGTTGATTTT	gattcatttaagggttataaaa	---...30...tatacttcacag	tgccctcc
P. Abe	attgcact	gtaagtacatca...763...ttcagtatcataactcacaa	ATTGGAGGCTGTTGATTTT	gattcatttaagggttataaaa	---...30...tatacttcacag	tgccctcc
C. Jac	attgcact	gtaagtacatca...770...ttcagtatcataactcacaa	ATTGGAGGCTGTTGATTTT	gattcatttaagggttataaaa	---...29...tatacttcacag	tgccctcc
M. Mus	attgcact	gtaagtacatca...710...--cagtatcataattcacaaa	TGGAGGCTGTTGATTTT	cgttataaaatttaaaatcctt	...26...tatacttcacag	tgccctcc
C. Por	attgcact	gtaagtacatca...737...--attatcataactcaaaaatc	GGAGGCTGTTGATTTT	catttaagggttataaaatcctt	...26...tatacttcacag	tgccctcc
O. Cun	attgcact	gtaagtacatca...738...ttcagtatcattactcacaa	ATTGGAGGCTGTTGATTTT	catttaagggttataaaatcctt	...26...tatacttcacag	tgccctcc
C. Fam	attgcact	gtaagtacatca...760...ttcaatataactcacaa	ATTGGAGGCTGTTGATTTT	gattcatttaagggttataaaatcctt	...34...tatacttcacag	tgccctcc
B. Tau	attgcact	gtaagtacatca...762...ttggattcagtagctcacaa	ATTGGAGGCTGTTGATTTT	catttaagggttataaaatcctt	...26...tatacttcacag	tgccctcc
S. Sus	attgcact	gtaagtacatca...765...ttcaatataactcacaa	ATTGGAGGCTGTTGATTTT	catttaagggttataaaatcctt	...26...tatacttcacag	tgccctcc
O. Avi	attgcact	gtaagtacatca...766...ttcagtatcataactcacga	ATTGGAGGCTGTTGATTTT	catttaagggttataaaatcctt	...26...tatacttcacag	tgccctcc
L. Afr	attgcact	gtaagtacatca...761...--cagtatcataattcacaaa	TGGAGGCTGTTGATTTT	catttaagggttataaaatcctt	...26...tatacttcacag	tgccctcc
	*****	*****	*** * ** ** *****	*** ** * ** *	*****	*****

id=462828 gene=ENSG00000162613 name=FUBP1 segment=chr1_78412262_78413137_-1 type=AN

H. Sap	tacattaa	tgttgccctgt...281...----ttaggaaatcacttgttta	GAAA	ctTCAACAGCCTTC	CAAT	ctgt---tttatatgatggacag	---...218...-atctgtagcaat	cagtattt
R. Mac	tacattaa	tgttgccctgt...320...----ttaggaaatcacttgttta	GAAA	ctTCAACAGCCTTC	CAAT	ctgt---tttatatgatggacag	---...211...-atctgtagcaat	cagtattt
P. Tro	tacattaa	tgttgccctgt...280...----ttaggaaatcacttgttta	GAAA	ctTCAACAGCCTTC	CAAT	ctgt---tttatatgatggacag	---...218...-atctgtagcaat	cagtattt
P. Abe	tacattaa	tgttgccctgt...281...----ttaggaaatcacttgttta	GAAA	ctTCAACAGCCTTC	CAAT	ctgt---tttatatgatggacag	---...216...-atctgtagcaat	cagtattt
C. Jac	tacattaa	tgttgccctgt...280...----ttcaggaaatcacttgttta	GAAA	ctTCAACAGCCTTC	CGAT	ctgt---tttatatgatggacag	---...221...-atctgtagcaac	cagtattt
M. Mus	tacataca	tgttgccctgt...273...tgagacataggaaatcattt	GGTC	gAAATtTCAACAGCCTTC	---	cagcccggttgatgatgataa	-----...245...aatctgca-taac	cagtattt
C. Por	tacattaa	tgttgccctgt...249...caagatataaggtaaatcattt	GGTC	gAAAAcTCAACAGCCTTC	---	acagtcggtttatgtgattg	-----...215...-ctatgtagcaac	ctatattt
O. Cun	tacattaa	tgttgccctgt...268...caagggttaggaaatcactt	GGTC	gAAAAcTCAACAGCCTTC	CAAT	ctgt---tttatatgatggacag	---...233...-atctgtagcaac	caatattt
C. Fam	tacattaa	tgttgccctgt...308...tatcgcttggttagaaactt	-----	TCAACAGCCTTC	CAAT	cttt-----ttagattgacaggac	...233...-ctgttagcaac	caatattt
B. Tau	tacattaa	tgttgccctgt...275...caagatttaggagatcattt	GGTC	gAAAAcTCAACAGCCTTC	CAGT	ctgt-----ttatgattgacaagac	...233...-ctgtatagcaac	caatattt
S. Sus	tacattaa	tgttgccctgt...272...caggatttaggagatcattt	GGTC	gAAAAcTCAACAGCCTTC	CAAT	ctgt-----ttatgattgacaagac	...237...-ctgtatagcaac	cagtattt
O. Avi	tacattaa	tgttgccctgt...275...caagggttaggagataattt	GGTC	gAAAAcTCAACAGCCTTC	CAGT	ctgt-----ttatgattgacaagac	...233...-ctgtatagcaac	caatattt
L. Afr	tacattaa	tgttgccctgt...264...caagatttaggaaatcattt	GGTC	gAAAAcTCAACAGCCTTC	---	caatctgttttatatgattga	-----...245...-ctgtatagcagt	caatattt
	**** *	*****	*	**	*****	*	** *	** * *

id=462831 gene=ENSG00000162613 name=FUBP1 segment=chr1_78411581_78412166_-1 type=IN VIEW

Figure 686: CS=3.9



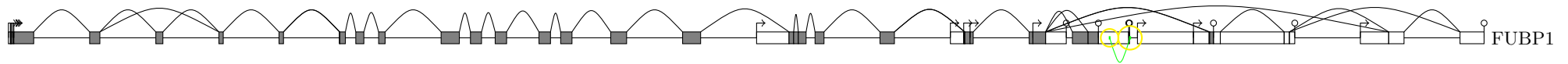
H. Sap	acttgatg	aagatcctaatt...126...ttagtgta-----gatgtacacatt CCAGCAA at GTAT tt GCAA ---ttagtggttgatgctttgtgatataaatgtac-tttttcaatgtatactttcacttttataaatgcctgttttgtgctttacaataaatgatatg	aaacctcc
R. Mac	acttgatg	aagatcctaatt...142...ttagtgta-----gatgtacacatt CCAGCAA at GTAT tt GCAA ---ttagtggttgatgctttgtgatataaatgtac-tttttcaatgtatactttcacttttataaatgcctgttttgtgctttacaataaatgatatg	aaacctcc
P. Tro	acttgatg	aagatcctaatt...191...--aatgtactttttcaatgtat----- ACTT t CACT t TAA -----aatgcctgttttgtgctttacaataaatgatatg	aaacctcc
P. Abe	acttgatg	aagatcctaatt...124...ttagtgta-----gatgtacacatt CCAGCAA at GTAT tt GCAA ---ttagtggttgatgctttgtgatataaatgtac-tttttcaatgtatactttcacttttataaatgcctgttttgtgctttacaataaatgatatg	aaacctcc
C. Jac	acttgatg	aagatcctaatt...128...ttagtgta-----gatgtacacatt CCAGCAA at GTAT tt GCAA ctattatgtggttgatgctttgtgatataaatgtac-tttttcaatgtatactttcacttttataaatgcctgttttgtgctttacaataaatgatatg	aaacctcc
M. Mus	acttgatg	aagatcctaatt...131...ttagtgta-----gatgtacacatt CCAGCAA at GTAT tt GCAA ctattatgtggttgatgctttgtgatataaatgtac-tttttcaatgtatactttcacttttataaatgcctgttttgtgctttacaataaatgatatg	aaacctcc
C. Por	acttgatg	aagatcctaatt...120...ctagtgtgta-----gatgtacacatt CCAGCAA at GTAT tt GCAA ctattatgtggttgatgctttgtgatataaatgtac-tttttcaatgtatactttcacttttataaatgcctgttttgtgctttacaataaatgatatg	aaacctcc
O. Cun	acttgatg	aagatcctaatt...120...ttagtgta-----gatgtacacatt CCAGCAA at GTAT tt GCAA ctattatgtggttgatgctttgtgatataaatgtac-tttttcaatgtatactttcacttttataaatgcctgttttgtgctttacaataaatgatatg	aaacctcc
C. Fam	acttgatg	aagatcctaatt...118...ttagtgta-----gatgtacacatt CCAGCAA at GTAT tt GCAA ctattatgtggttgatgctttgtgatataaatgtac-tttttcaatgtatactttcacttttataaatgcctgttttgtgctttacaataaatgatatg	aaacctcc
B. Tau	gcttgatg	aagatcctaatt...144...ttagtgta-----gatgtacacatt CCAGCAA at GTAT tt GCAA ctattatgtggttgatgctttgtgatataaatgtactttttcaatgtatactttcacttttataaatgcctgttttgtgctttacaataaatgatatg	aaacctcc
E. Cab	acttgatg	aagatcctaatt...115...ttagtgta-----gatgtacacatt CCAGCAA at GTAT tt GCAA ctattatgtggttgatgctttgtgatataaatgtac-tttttcaatgtatactttcacttttataaatgcctgttttgtgctttacaataaatgatatg	aaacctcc
S. Sus	gcttgatg	aagatcctaatt...141...ttagtgta-----gatgtacacatt CCAGCAA at GTAT tt GCAA ctattatgtggttgatgctttgtgatataaatgtactttttcaatgtatactttcacttttataaatgcctgttttgtgctttacaataaatgatatg	aaacctcc
O. Avi	gcttgatg	aagatcctaatt...146...ttagtgta-----gatgtacacatt CCAGCAA at GTAT tt GCAA ctattatgtggttgatgctttgtgatataaatgtactttttcaatgtatactttcacttttataaatgcctgttttgtgctttacaataaatgatatg	aaacctcc
L. Afr	acttgatg	aagatcctaatt...153...ttagtgta-----gatgtacacatt CCAGCAA at GTAT tt GCAA ctattatgtggttgatgctttgtgatataaatgtac-tttttcaatgtatactttcacttttataaatgcctgttttgtgctttacaataaatgatatg	aaacctcc
	*****	*****	*****

id=462820 gene=ENSG0000162613 name=FUBP1 segment=chr1_78414097_78414367_-1 type=AN

H. Sap	tcatttta	ttactctttaac-...28...-gaaatccattg-ttttactct TG CATAT TTG TTGGctctttgcatattaatataatagactacatgcaaatacagtcctgtcttgccattgtctgttgaag	tg	cagggt
R. Mac	tcatttta	ttactctttaac-...28...-gaaatccattg-ttttactct TG CATAT TTG TTGGctctttgcatattaatataatagactacatgcaaatacagtcctgtcttgccattgtctgttgaag	tg	cagggt
P. Tro	tcatttta	ttactctttaac-...102...-gtctgtcttgccattgtctg TTGAA -- GTG c AGGT -----t		
P. Abe	tcatttta	ttactctttaac-...28...-gaaatccattg-ttttactct TG CATAT TTG TTGGctctttgcatattaatataatagactacatgcaaatacagtcctgtcttgccattgtctgttgaag	tg	cagggt
C. Jac	tcatttta	ttactctttaac-...28...-tgaaatccattg-ttttactc-- TG CATa TTG TTGGctctttgcatattaatataatagactacatgcaaatacagtcctgtcttgccattgtctgttgaag	tg	cagggt
M. Mus	tcatttta	ttactctttaac-...27...-tgaaaaccattg-ttttactc-- TG CATa TTG TTGGctctttgcatattaatataatagactacatgcaaatacagtcctgtcttgccattgtctgttgaag	tg	cagggt
C. Por	tcatttta	ttactctttaac-...28...-gaaatccattg-ttttactct TG CATAT TTG TTGGctc-ttgcatattaata--tagactacatgcaaatacagtcctgtcttgccattgtctgttgaag	tg	cagggt
O. Cun	tcatttta	ttactctttaac-...28...-gaaatccattg-ttttactct TG CATAT TTG TTGGctctttgcatattaatataatagactacatgcaaatacagtcctgtcttgccattgtctgttgaag	tg	cagggt
C. Fam	tcatttta	ttactctataac-...26...-tgaaatccattg-ttttactc-- TG CATa TTG TTGGctctttgcatattaatataatagactacatgcaaatacagtcctgtcttgccattgtctgttgaag	tg	cagggt
B. Tau	tcatttta	ttactctataac-...28...-gaaatccattg-ttttactct TG CATAT TTG TTGGctctttgcatattaatataatagactacatgcaaatacagtcctgtcttgccattgtctgttgaag	tg	cagggt
E. Cab	tcatttta	tt-ctctataaca-...27...-gaaatccattg-ttttactct TG CATAT TTG TTGGctctttgcatattaatataatagactacatgcaaatacagtcctgtcttgccattgtctgttgaag	tg	cagggt
S. Sus	tcatttta	ttactctataac-...28...-gaaatccattg-ttttactct TG CATAT TTG TTGGctctttgcatattaatataatagactacatgcaaatacagtcctgtcttgccattgtctgttgaag	tg	cagggt
O. Avi	tcatttta	ttactctataac-...28...-gaaatccattg-ttttactct TG CATAT TTG TTGGctctttgcatattaatataatagactacatgcaaatacagtcctgtcttgccattgtctgttgaag	tg	cagggt
L. Afr	tcatttta	ttactctttaac-...29...-aaatccattg-ttttactct TG CATAT TTG TTGGctctttgcatattaatataatagactacatgcaaatacagtcctgtcttgccattgtctgttgaag	tg	cagggt
	*** **	** **	*** **	** **

id=462824 gene=ENSG0000162613 name=FUBP1 segment=chr1_78413238_78413377_-1 type=AN VIEW

Figure 687:



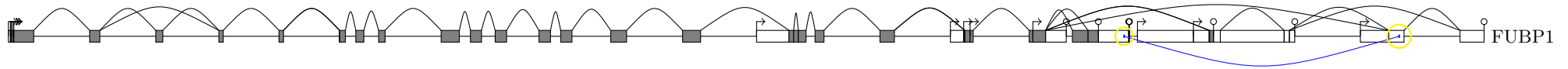
H.Sap	acttgatg	aagatcttaatt...52...tacaaaatatctatcactac	TGATAGGAGGTT	ATATT	tctgtgtagaaatgaaaatt...137...ataaatgatatg	aaacctcc
R.Mac	acttgatg	aagatcttaatt...68...tacaaaatatctatcactac	TGATAGGAGGTT	ATATT	tctgtgtagaaatgaaaatt...137...ataaatgatatg	aaacctcc
P.Tro	acttgatg	aagatcttaatt...52...tacaaaatatctatcactac	TGATAGGAGGTT	ATATT	tctgtgtagaaatgaaaata...137...ataaatgatatg	aaacctcc
P.Abe	acttgatg	aagatcttaatt...50...tacaaaatatctatcactac	TGATAGGAGGTT	ATATT	tctgtgtagaaatgaaaatt...137...ataaatgatatg	aaacctcc
C.Jac	acttgatg	aagatcttaatt...54...tacaaaatatctatcactac	TGATAGGAGGTT	ATATT	tctgtgtagaaatgaaaatt...140...ataaatgatatg	aaacctcc
M.Mus	acttgatg	aagatcttaatt...57...tacaaaataactatcactac	TGATAGGAGGTT	ATATT	tctgtgtagaaatgaaaatt...140...ataaatgatatg	aaacctcc
C.Por	acttgatg	aagatcttaatt...46...tacaaaatatctatcactac	TGATAGGAGGTT	ATATT	tctgtgtagaaatgaaaatt...140...ataaatgatatg	aaacctcc
O.Cun	acttgatg	aagatcttaatt...47...tacaaaatatctatcactac	TGATAGGAGGTT	ATATT	tctgtgtagaaatgaaaatg...139...ataaatgatatg	aaacctcc
C.Fam	acttgatg	aagatcttaatt...44...tacaaaatatctatcactac	TGATAGGAGGTT	ATATT	tctgtgtagaaatgaaaatt...140...ataaatgatatg	aaacctcc
B.Tau	gcttgatg	aagatcttaatt...70...tacaaaatatctatcactac	TGATAGGAGGTT	ATATT	tctgtgtagaaatgaaaatt...141...ataaatgatatg	aaacctcc
E.Cab	acttgatg	aagatcttaatt...41...tacaaaatatctatcactac	TGATAGGAGGTT	ATATT	tctgtgtagaaatgaaaatt...140...ataaatgatatg	aaacctcc
S.Sus	gcttgatg	aagatcttaatt...67...tacaaaatatctatcactac	TGATAGGAGGTT	ATATT	tctgtgtagaaatgaaaatt...141...ataaatgatatg	aaacctcc
O.Avi	gcttgatg	aagatcttaatt...75...---aaaatatctatcactactga	TAGGAGGTT	ATATT	tctgtgtagaaatgaaaatt...141...ataaatgatatg	aaacctcc
L.Afr	acttgatg	aagatcttaatt...79...tacaaaatatctatcactac	TGATAGGAGGTT	ATATT	tctgtgtagaaatgaaaatt...140...ataaatgatatg	aaacctcc
	*****	*****	*****	*****	*****	*****

id=462820 gene=ENSG00000162613 name=FUBP1 segment=chr1_78414097_78414367_-1 type=AN

H.Sap	atGATATg	aAACCTCCt	TGTCg
R.Mac	atGATATg	aAACCTCCt	TGTCg
P.Tro	atGATATg	aAACCTCCt	TGTCg
P.Abe	atGATATg	aAACCTCCt	TGTCg
C.Jac	atGATATg	aAACCTCCt	TGTCg
M.Mus	atGATATg	aAACCTCCt	TGTCg
C.Por	atGATATg	aAACCTCCt	TGTCg
O.Cun	atGATATg	aAACCTCCt	TGTCg
C.Fam	atGATATg	aAACCTCCt	TGTCg
B.Tau	atGATATg	aAACCTCCt	TGTCg
E.Cab	atGATATg	aAACCTCCt	TGTCg
S.Sus	atGATATg	aAACCTCCt	TGTCg
O.Avi	atGATATg	aAACCTCCTG	nnnnn
L.Afr	atGATATg	aAACCTCCt	TGTCg
	*****	*****	*****

id=462821 gene=ENSG00000162613 name=FUBP1 segment=chr1_78414090_78414096_-1 type=AN VIEW

Figure 688:



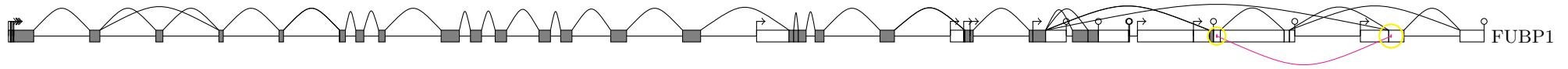
H.Sap	acttgatg	aagatcttaatt...182...tgtgatataaatgtactttt	TCAATGTATAC	TTCA	cttttaaaatgcctgttttgctttacaataaatgatatg	aaacctcc
R.Mac	acttgatg	aagatcttaatt...198...tgtgatataaatgtactttt	TCAATGTATAC	TTCA	cttttaaaatgcctgttttgctttacaataaatgatatg	aaacctcc
P.Tro	acttgatg	aagatcttaatt...182...tgtgatataaatgtactttt	TCAATGTATAC	TTCA	cttttaaaatgcctgttttgctttacaataaatgatatg	aaacctcc
P.Abe	acttgatg	aagatcttaatt...180...tgtgatataaatgtactttt	TCAATGTATAC	TTCA	cttttaaaatgcctgttttgctttacaataaatgatatg	aaacctcc
C.Jac	acttgatg	aagatcttaatt...187...tgtgatataaatgtactttt	TCAATGTATAC	TTCA	cttttaaaatgcctgttttgctttacaataaatgatatg	aaacctcc
M.Mus	acttgatg	aagatcttaatt...190...tgtgatataaatgtactttt	TCAATGTATAC	TTCA	cttttaaaatgcctgttttgctttacaataaatgatatg	aaacctcc
C.Por	acttgatg	aagatcttaatt...179...tgtgatataaatgtactttt	TCAATGTATAC	TTCA	cttttaaaatgcctgttttgctttacaataaatgatatg	aaacctcc
O.Cun	acttgatg	aagatcttaatt...179...tgtgatataaatgtactttt	TCAATGTATAC	TTCA	cttttaaaatgcctgttttgctttacaataaatgatatg	aaacctcc
C.Fam	acttgatg	aagatcttaatt...177...tgtgatataaatgtactttt	TCAATGTATAC	TTCA	cttttaaaatgcctgttttgctttacaataaatgatatg	aaacctcc
B.Tau	gcttgatg	aagatcttaatt...204...-gtgatataaatgtactttt	TCAATGTATAC	TTCA	cttttaaaatgcctgttttgctttacaataaatgatatg	aaacctcc
E.Cab	acttgatg	aagatcttaatt...174...tgtgatataaatgtactttt	TCAATGTATAC	TTCA	cttttaaaatgcctgttttgctttacaataaatgatatg	aaacctcc
S.Sus	gcttgatg	aagatcttaatt...201...-gtgatataaatgtactttt	TCAATGTATAC	TTCA	cttttaaaatgcctgttttgctttacaataaatgatatg	aaacctcc
O.Avi	gcttgatg	aagatcttaatt...206...-gtgatataaatgtactttt	TCAATGTATAC	TTCA	cttttaaaatgcctgttttgctttacaataaatgatatg	aaacctcc
L.Afr	acttgatg	aagatcttaatt...212...tgtgatataaatgtactttt	TCAATGTATAC	TTCA	cttttaaaatgcctgttttgctttacaataaatgatatg	aaacctcc
	*****	*****	*****	*****	*****	*****

id=462820 gene=ENSG0000162613 name=FUBP1 segment=chr1_78414097_78414367_-1 type=AN

H.Sap	acacacag	tgctgaagatgc...46...accataaaagaggaatcctt	TGAGtGTATGc	ATTGG	tgagccgatgagcatggaccatagaagggtcaatgtagaag	gtaaaatt
R.Mac	acacacag	tgctgaagatgc...46...accataaaagaggaatcctt	TGAGtGTATGc	ATTGG	tgagccgatgagcatggaccatagaagggtcaatgtagaag	gtaaaatt
P.Tro	acacacag	tgctgaagatgc...46...accataaaagaggaatcctt	TGAGtGTATGc	ATTGG	tgagccgatgagcatggaccatagaagggtcaatgtagaag	gtaaaatt
P.Abe	acacacag	tgctgaagatgc...46...accataaaagaggaatcctt	TGAGtGTATGc	ATTGG	tgagccgatgagcatggaccatagaagggtcaatgtagaag	gtaaaatt
C.Jac	acacacag	tgctgaagatgc...46...accataaaagaggaatcctt	TGAGtGTATGc	ATTGG	tgagccgatgagcatggaccatagaagggtcaatgtagaag	gtaaaatt
M.Mus	acacacag	tgctgaagatgc...46...accataaaagaggaatcctt	TGAGtGTATGc	ATTGG	tgagccgatgagcatggaccatagaagggtcaatgtagaag	gtaaaatt
C.Por	acacacag	tgctgaagatgc...46...accataaaagaggaatcctt	TGAGtGTATGc	ATTGG	tgagccgatgagcatggaccatagaagggtc- atgtagaag	gtaaaatt
O.Cun	acacacag	tgctgaagatgc...46...accataaaagaggaatcctt	TGAGtGTATGc	ATTGG	tgagccgatgagcatggaccatagaagggtcaatgtagaag	gtaaaatt
C.Fam	acacacag	tgctgaagatgc...46...accataaaagaggaatcctt	TGAGtGTATGc	ATTGG	tgagccgatgagcatggaccatagaagggtcaatgtagaag	gtaaaatt
B.Tau	acacacag	tgctgaagatgc...46...accataaaagaggaatcctt	TGAGtGTATGc	ATTGG	tgagccgatgagcatggaccatagaagggtcaatgtagaag	gtaaaatt
E.Cab	acacacag	tgctgaagatgc...46...accataaaagaggaatcctt	TGAGtGTATGc	ATTGG	tgagccgatgagcatggaccatagaagggtcaatgtagaag	gtaaaatt
S.Sus	acacacag	tgctgaagatgc...46...accataaaagaggaatcctt	TGAGtGTATGc	ATTGG	tgagccgatgagcatggaccatagaagggtcaatgtagaag	gtaaaatt
O.Avi	acacacag	tgctgaagatgc...46...accataaaagaggaatcctt	TGAGtGTATGc	ATTGG	tgagccgatgagcatggaccatagaagggtcaatgtagaag	gtaaaatt
L.Afr	acacacag	tgctgaagatgc...46...accataaaagaggaatcctt	TGAGtGTATGc	ATTGG	tgagccgatgagcatggaccatagaagggtcaatgtagaag	gtaaaatt
	*****	*****	*****	*****	*****	*****

id=462833 gene=ENSG0000162613 name=FUBP1 segment=chr1_78411191_78411327_-1 type=AN VIEW

Figure 689:



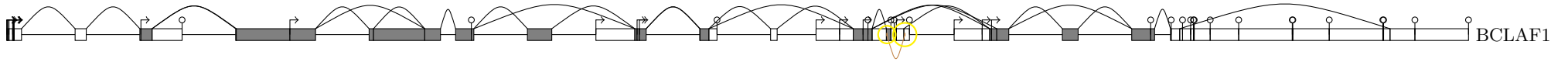
H. Sap	ctctgtag	gggtgaggaggact	GTGCTg	TGTA	CATC	cttgattgtgttccttcaaggagcattgcact	gtaagtac
R. Mac	ctctgtag	gggtgaggaggact	GTGCTg	TGTA	CATC	cttgattgtgttccttcaaggagcattgcact	gtaagtac
P. Tro	ctctgtag	gggtgaggaggact	GTGCTg	TGTA	CATC	cttgattgtgttccttcaaggagcattgcact	gtaagtac
P. Abe	ctctgtag	gggtgaggaggact	GTGCTg	TGTA	CATC	cttgattgtgttccttcaaggagcattgcact	gtaagtac
C. Jac	ctctgtag	gggtgaggaggact	GTGCTg	TGTA	CATC	cttgattgtgttccttcaaggagcattgcact	gtaagtac
M. Mus	ctctgtag	gggtgaggaggact	GTGCTg	TGTA	CATC	cttgattgtgttccttcaaggagcattgcact	gtaagtac
C. Por	ctctgtag	gggtgaggaggact	GTGCTg	TGTA	CATC	cttgattgtgttccttcaaggagcattgcact	gtaagtac
O. Cun	ctctgtag	gggtgaggaggact	GTGCTg	TGTA	CATC	cttgattgtgttccttcaaggagcattgcact	gtaagtac
C. Fam	ctctgtag	gggtgaggaggact	GTGCTg	TGTA	CATC	cttgattgtgttccttcaaggagcattgcact	gtaagtac
B. Tau	ctctgtag	gggtgaggaggact	GTGCTg	TGTA	CATC	cttgattgtgttccttcaaggagcattgcact	gtaagtac
S. Sus	ctctgtag	gggtgaggaggact	GTGCTg	TGTA	CATC	cttgattgtgttccttcaaggagcattgcact	gtaagtac
O. Avi	ctctgtag	gggtgaggaggact	GTGCTg	TGTA	CATC	cttgattgtgttccttcaaggagcattgcact	gtaagtac
L. Afr	ctctgtag	gggtgaggaggact	GTGCTg	TGTA	CATC	cttgattgtgttccttcaaggagcattgcact	gtaagtac
*****	*****	*****	*****	*****	*****	*****	*****

id=462827 gene=ENSG00000162613 name=FUBP1 segment=chr1_78413138_78413198_-1 type=AN

H. Sap	acacacag	tgctgaa	GATGc	TGCAAGCAC	caaatcatagctcataaaat...84...tcaatgtagaag	gtaaaatt
R. Mac	acacacag	tgctgaa	GATGc	TGCAAGCAC	caaatcatagctcataaaat...84...tcaatgtagaag	gtaaaatt
P. Tro	acacacag	tgctgaa	GATGc	TGCAAGCAC	caaatcatagctcataaaat...84...tcaatgtagaag	gtaaaatt
P. Abe	acacacag	tgctgaa	GATGc	TGCAAGCAC	caaatcatagctcataaaat...84...tcaatgtagaag	gtaaaatt
C. Jac	acacacag	tgctgaa	GATGc	TGCAAGCAC	caaatcatagctcataaaat...84...tcaatgtagaag	gtaaaatt
M. Mus	acacacag	tgctgaa	GATGc	TGCAAGCAC	caaatcatagctcataaaat...84...tcaatgtagaag	gtaaaatt
C. Por	acacacag	tgctgaa	GATGc	TGCAAGCAC	caaatcatagctcataaaat...83...tcatgtagaag	gtaaaatt
O. Cun	acacacag	tgctgaa	GATGc	TGCAAGCAC	caaatcatagctcataaaat...84...tcaatgtagaag	gtaaaatt
C. Fam	acacacag	tgctgaa	GATGc	TGCAAGCAC	caaatcatagctcataaaat...84...tcaatgtagaag	gtaaaatt
B. Tau	acacacag	tgctgaa	GATGc	TGCAAGCAC	caaatcatagctcataaaat...84...tcaatgtagaag	gtaaaatt
S. Sus	acacacag	tgctgaa	GATGc	TGCAAGCAC	caaatcatagctcataaaat...84...tcaatgtagaag	gtaaaatt
O. Avi	acacacag	tgctgaa	GATGc	TGCAAGCAC	caaatcatagctcataaaat...84...tcaatgtagaag	gtaaaatt
L. Afr	acacacag	tgctgaa	GATGc	TGCAAGCAC	caaatcatagctcataaaat...84...tcaatgtagaag	gtaaaatt
*****	*****	*****	*****	*****	*****	*****

id=462833 gene=ENSG00000162613 name=FUBP1 segment=chr1_78411191_78411327_-1 type=AN VIEW

Figure 690:



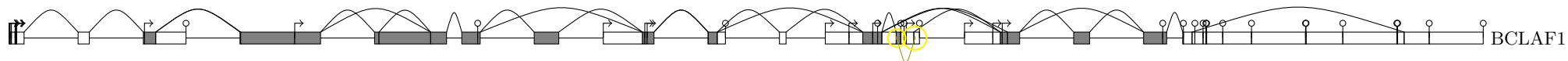
H. Sap	gatgacag	gtaattgttcaa...92...ttaaacaattaaaattatttGTTTACAg	CAAAaatg
R. Mac	gatgacag	gtaattgttcaa...92...ttaaacaattaaaattatttGTTTACAg	CAAAaatg
P. Tro	gatgacag	gtaattgttcaa...92...ttaaacaattaaaattatttGTTTACAg	CAAAaatg
P. Abe	gatgacag	gtaattgttcaa...92...ttaaacaattaaaattatttGTTTACAg	CAAAaatg
C. Jac	gatgacag	gtaattgttcaa...92...ttaaacaattaaaattatttGTTTACAg	CAAAaatg
M. Mus	gatgacag	gtgattgttcaa...93...ttaaacaattaaaattatttGTTTACAg	CAAAaatg
R. Nor	gatgacag	gtgactgtttaa...91...ttaaacaattaaaattatttGTTTACAg	CAAAaatg
C. Por	gatgacag	gtaatttggaaa...89...ttaaacaattaaaattatttGTTTACAg	CAAAaatg
O. Cun	gatgacag	gtaattgttaag...94...ttaaacaattaaaattatttGTTTACAg	CAAAaatg
C. Fam	gatgacag	gtaattgtttaa...92...ttaaacaattaaaattatttGTTTACAg	CAAAaatg
E. Cab	gatgacag	gtaattgtttaa...92...ttaaacaattaaaattatttGTTTACAg	CAAAaatg
S. Sus	gatgacag	gtaattgtttaa...92...ttaaacaattaaaattatttGTTTACAg	CAAAaatg
L. Afr	gatgacag	gtaattgtttaa...92...ttaaacaattaaaattatttGTTTACAg	CAAAaatg
	*****	** * * * *	*****

id=499555 gene=ENSG00000029363 name=BCLAF1 segment=chr6_136590442.136590574_-1 type=AN

H. Sap	cagTTTGT	GTAaGAAC	tttggttcgttatgcttgattccgcactttttcaactcataaca	cccagagt
R. Mac	cagTTTGT	GTAaGAAC	tttggttcgttatgcttgattccgcactttttcaactcataaca	cccagagt
P. Tro	cagTTTGT	GTAaGAAC	tttggttcgttatgcttgattccgcactttttcaactcataaca	cccagagt
P. Abe	cagTTTGT	GTAaGAAC	tttggttcgttatgcttgattccgcactttttcaactcataaca	cccagagt
C. Jac	cagTTTGT	GTAaGAAC	tttggttcgttatgcttgattccgcactttttcaactcataaca	cccagagt
M. Mus	cagTTTGT	GTAaGAAC	tttggttcgttatgcttgattccgcactttttcaactcataaca	cccagagt
R. Nor	cagTTTGT	GTAaGAAC	tttggttcgttatgcttgattccgcactttttcaactcataaca	cccagagt
C. Por	cagTTTGT	GTAaGAAC	tttggttcgttatgcttgattccgcactttttcaactcataaca	cccagagt
O. Cun	cagTTTGT	GTAaGAAC	tttggttcgttatgcttgattccgcactttttcaactcataaca	cccagagt
C. Fam	cagTTTGT	GTAaGAAC	tttggttcgttatgcttgattccgcactttttcaactcataaca	cccagagt
E. Cab	cagTTTGT	GTAaGAAC	tttggttcgttatgcttgattccgcactttttcaactcataaca	cccagagt
S. Sus	cagTTTGT	GTAaGAAC	tttggttcgttatgcttgattccgcactttttcaactcataaca	cccagagt
L. Afr	cagTTTGT	GTAaGAAC	tttggttcgttatgcttgattccgcactttttcaactcataaca	cccagagt
	*****	*****	*****	*****

id=499560 gene=ENSG00000029363 name=BCLAF1 segment=chr6_136590227.136590278_-1 type=AN VIEW

Figure 691:



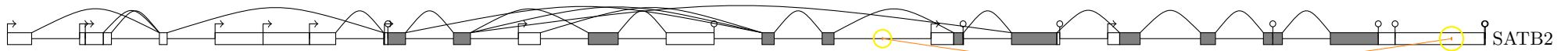
H.Sap	gatgacag	gtaattgttcaa...92...ttaaacaattaaaattattt	GTTTACAg	CAAAaatg
R.Mac	gatgacag	gtaattgttcaa...92...ttaaacaattaaaattattt	GTTTACAg	CAAAaatg
P.Tro	gatgacag	gtaattgttcaa...92...ttaaacaattaaaattattt	GTTTACAg	CAAAaatg
P.Abe	gatgacag	gtaattgttcaa...92...ttaaacaattaaaattattt	GTTTACAg	CAAAaatg
C.Jac	gatgacag	gtaattgttcaa...92...ttaaacaattaaaattattt	GTTTACAg	CAAAaatg
M.Mus	gatgacag	gtgattgttcaa...93...ttaaacaattaaaattattt	GTTTACAg	CAAAaatg
R.Nor	gatgacag	gtgactgtttaa...91...ttaaacaattaaaattattt	GTTTACAg	CAAAaatg
C.Por	gatgacag	gtaatttggaaa...89...ttaaacaattaaaattattt	GTTTACAg	CAAAaatg
O.Cun	gatgacag	gtaattgttaag...94...ttaaacaattaaaattattt	GTTTACAg	CAAAaatg
C.Fam	gatgacag	gtaattgtttaa...92...ttaaacaattaaaattattt	GTTTACAg	CAAAaatg
E.Cab	gatgacag	gtaattgtttaa...92...ttaaacaattaaaattattt	GTTTACAg	CAAAaatg
S.Sus	gatgacag	gtaattgtttaa...92...ttaaacaattaaaattattt	GTTTACAg	CAAAaatg
L.Afr	gatgacag	gtaattgtttaa...92...ttaaacaattaaaattattt	GTTTACAg	CAAAaatg
	*****	** * * * *	*****	*****

id=499555 gene=ENSG00000029363 name=BCLAF1 segment=chr6_136590442.136590574_-1 type=AN

H.Sap	acaaatta	atgtgtcctatt...33...cagtgcatttctagaacag	TTTGT	GTAaGAAc
R.Mac	acaaatta	atgtgtcctatt...33...cagtgcatttctagaacag	TTTGT	GTAaGAAc
P.Tro	acaaatta	atgtgtcctatt...33...cagtgcatttctagaacag	TTTGT	GTAaGAAc
P.Abe	acaaatta	atgtgtcctatt...33...cagtgcatttctagaacag	TTTGT	GTAaGAAc
C.Jac	acaaatta	atgtgtcctatt...33...cagtgcatttctagaacag	TTTGT	GTAaGAAc
M.Mus	acaaatta	atgtgtcctatt...33...cagtgcatttctagaacag	TTTGT	GTAaGAAc
R.Nor	acaaatta	atgtgtcctatt...33...cagtgcatttctagaacag	TTTGT	GTAaGAAc
C.Por	acaaatta	atgtgtcctatt...33...cagtgcatttctagaacag	TTTGT	GTAaGAAc
O.Cun	acaaatta	atgtgtcctatt...33...cagtgcatttctagaacag	TTTGT	GTAaGAAc
C.Fam	acaaatta	atgtgtcctatt...33...cagtgcatttctagaacag	TTTGT	GTAaGAAc
E.Cab	acaaatta	atgtgtcctatt...33...cagtgcatttctagaacag	TTTGT	GTAaGAAc
S.Sus	acaaatta	atgtgtcctatt...33...cagtgcatttctagaacag	TTTGT	GTAaGAAc
L.Afr	acaaatta	atgtgtcctatt...33...cagtgcatttctagaacag	TTTGT	GTAaGAAc
	*****	*****	*****	*****

id=499559 gene=ENSG00000029363 name=BCLAF1 segment=chr6_136590279.136590348_-1 type=AN VIEW

Figure 692:



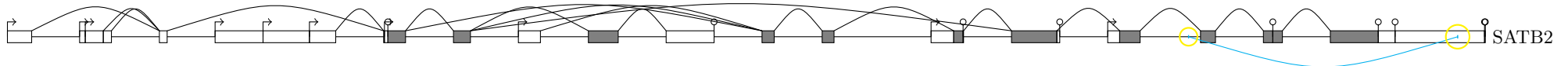
H.Sap	tctcccag	gtcagtatcttc...4783...	---tg	tctctgcagtgtagcac	GGATG	ttCTCAGATTCTTGGCTGTGTAAGCTTG	ttGCAGT	tgGAAGcGGAA	cagaacatctgaaaggcat	-----	...91...	tg	tctctgtcccc	tccattgt
R.Mac	tctcccag	gtcagtatcttc...4783...	---tg	tctctgcagtgtagcac	GGATG	ttCTCAGATTCTTGGCTGTGTAAGCTTG	ttGCAGT	tgGAAGcGGAA	cagaacatctgaaaggcat	-----	...91...	tg	tctctgtcccc	tccattgt
P.Tro	tctcccag	gtcagtatcttc...4783...	---tg	tctctgcagtgtagcac	GGATG	ttCTCAGATTCTTGGCTGTGTAAGCTTG	ttGCAGT	tgGAAGcGGAA	cagaacatctgaaaggcat	-----	...91...	tg	tctctgtcccc	tccattgt
P.Abe	tctcccag	gtcagtatcttc...4783...	---tg	tctctgcagtgtagcac	GGATG	ttCTCAGATTCTTGGCTGTGTAAGCTTG	ttGCAGT	tgGAAGcGGAA	cagaacatctgaaaggcat	-----	...91...	tg	tctctgtcccc	tccattgt
C.Jac	tctcccag	gttagtatctcc...4783...	---tg	tctctgcagtgtagcac	GGATG	ttCTCAGATTCTTGGCTGTGTAAGCTTG	ttGTAGT	tgGAAGcGGAA	cagaacatcttaaaggcat	-----	...91...	tg	tctctgtcccc	tccattgt
M.Mus	tctcccag	gtcagtgctcc...4786...	---tg	tctctgcagtgtagcac	GGATG	ttCTCAGATTCTTGGCTGTGTAAGCTTG	ttGCAGT	tgGAAGAGGAAcAGAG	acatctgagaagcattatct	-----	...83...	tg	gcctaactc	tctgtctt
R.Nor	tctcccag	gtcagtgctct...4785...	---tg	tctctgcagtgtagcac	GGATG	ttCTCAGATTCTTGG	-----	-----	ctgtgtaagcttggtgcagt	-----	...120...	cg	cctggcctc	tccgactt
O.Cun	tctcccag	gtcagtatctcc...4614...	gaaag	tttta-actttgaatc	-----	-----	-----	GATT-TTGGTTGAA	-----	-----	...298...	tatt	gcatctc	tccagctt
C.Fam	tctcccag	gtcagtatatcc...4783...	---tg	tctctgcagtgtagcac	GGATG	ttCTCAGATTCTTGG	-----	-----	ctgtgtaagcttggtgcagt	-----	...122...	tg	ctgcctc	tccatctt
F.Cat	tctcccag	gtcagtatatcc...4784...	---tg	tctctgcagtgtagcac	GGATG	ttCTCAGATTCTTGG	-----	-----	ctgtgtgagcttggtgcagt	-----	...121...	tg	ctgcctc	tccatctt
B.Tau	tctcccag	gtcagtgcttc...4783...	---tg	tctctgcagtgtagcac	GGATG	ttCTCAGATTCTTGGCTGTGTAAGCTTG	ttGCAGT	tgGAAAgcTGAA	cagaatatctgaaaggcat	-----	...91...	tg	ctctgtccc	tctctttg
E.Cab	tctcccag	gtcagtatctg...4783...	---tg	tctctgcagtgtagcac	GGATG	ttCTCAGATTCTTGGCTGTGTAAGCTTG	-----	-----	attgcagttggaagcgaac	-----	...110...	tg	ctctgtccc	tccatctt
O.Avi	tctcccag	gtcagtgcttc...4783...	---tg	tctctgcagtgtagcac	GGATG	ttCTCAGATTCTTGGCTGTGTAAGCTTG	ttGCAGT	tgGAAAgcTGAA	cagaatatctgaaaggcat	-----	...91...	tg	ctctgtccc	tctttttg
L.Afr	tctcccag	gtcggtatctcc...4785...	---tg	tctctgcagtgtagcac	GGATG	ttCTCAGATTCTTGGCTGTGTAAGCTTG	-----	-----	tgccgttgaagcgaacaga	...106...	tg	accctccc	tccc	

id=337262 gene=ENSG00000119042 name=SATB2 segment=chr2.200233667_200245086_-1 type=IN

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R.Mac	ttggcaaa	gacactaaagcg...2083...	-----	gctaagctctgccttttatt	TTTT	aaTTTCACTGCCAAGTTTGC	aGTGGT	CTAAgtGAATC	tgTGGGCATT	tagcctgtggtccttgcaga	...308...	aac	gattcaat	aaatatga			
P.Tro	ttggcaaa	gacactaaagcg...2054...	-----	gctaagctctgccttttatt	TTTT	aaTTTCACTGCCAAGTTTGC	aGTGGT	CTAAgtGAATC	tgTGGGCATT	tagcctgtggtccttgcaga	...311...	aac	gattcaat	aaatatga			
P.Abe	ttggcaaa	gacactaaagcg...2062...	-----	gctaagctctgccttttatt	TTTT	aaTTTCACTGCCAAGTTTGC	aGTGGT	CTAAgtGAATC	tgTGGGCATT	tagcctgtggtccttgcaga	...311...	aac	gattcaat	aaatatga			
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R.Nor	ttggcaaa	gacactaaagtgt...2132...	-----	ctgcccagtttgcagtgatt	-----	-----	-----	CTAAgtGAATC	tgTGGGCATT	tagcctgtggtccttgcaga	...309...	aac	gattcaat	aaatctga			
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C.Fam	ttggcaaa	gacactaaaagt...2069...	-----	ctgccaagtttgcagtgatt	-----	-----	-----	CTAAgtGAATC	tgTGGGCATT	tagcctgtggtccttgcaga	...309...	aac	gattcaat	aaatatga			
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E.Cab	ttggcaaa	gacactaaaagt...2056...	-----	tatttttaatttcaactgcc	-----	-----	-----	AAGTTTGC	aGTGGT	CTAAgtGAATC	tgTGGGCATT	tagcctgtggtccttgcaga	...307...	aac	gattcaat	aaatatga	
O.Avi	ttggcaaa	gacactaaaagt...2041...	-----	ctaagctctgccttttatt	TTTA	aaTTTCACTGCCAAGTTTGC	aGTGGT	CTAAgtGAATC	tgTGGGCATT	tagcctgtggtccttgcaga	...315...	aac	gattcaaa	aaannnn			
L.Afr	ttggcaaa	gacactaaaagt...2135...	-----	ttttatttttaatttcaact	-----	-----	-----	GCGG	aGTTTGC	aGTGGT	CTAAgtGAATC	tgTGGGCATT	tagcctgtggtccttgcaga	...311...	aac	gattcaat	aaatatga

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Figure 693: CS=4.2



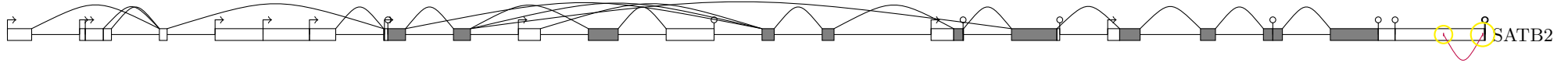
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R. Mac	ccctcag	gtgagaaacttg...4461...aatcacaattaacctgatta-	GAATAATGGACA	ggaagtgtccctctgtagcta	aatgcagttggcatcagct:::tttaaattatttttcatggctctctggtag	gccaaaac
P. Tro	ccctcag	gtgagaaacttg...4578...aatcacaattaacctgatta-	GAATAATGGACA	ggaagtgtccctctgtagcta	aatgcagttggcatcagct:::tttaaattatttttcatggctctctggtag	gccaaaac
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C. Jac	ccctcag	gtgagaaacttg...4577...aatcacaattaacctgatta-	GAATAATGGACA	ggaagtgtccctctgtagcta	aatgcagttggcatcagct:::tttaaattatttttcatggctctctggtag	gccaaaac
M. Mus	ccccacag	gtgagctgtctg...4269...aatcacaattaacctgatta-	GAATAATGGACA	ggaagtgtccctctgtagcta	aatgcagttggcatcagct:::tttaaattatttttcatggctctctggtag	gccaaaac
R. Nor	ccccacag	gtgagcctctg...3987...aatcacaattaacctgatta-	GAATAATGGACA	ggaagtgtccctctgtagcta	aatgcagttggcatcagct:::tttaaattatttttcatggctctctggtag	gccaaaac
C. Por	ccccacag	gtgagcccccg...3166...aaccacaattaacctgatta-	GAATAATGGACA	ggaagtgtccctctgtagc	aaatgtggctggcatcagct:::cttaaattgttattttcacggctctctggtag	gccaaaac
O. Cun	ccctcag	gtgagacatttg...4308...aatcacaattaacctgatta-	GAATAATGGACA	ggaagtgtccctctgtagcta	aatgcagttggcatcagct:::tttaaattatttttcatggctctctggtag	gccaaaac
C. Fam	ccctcag	gtgagatatttg...4053...aatcacaattaacccgatta-	GAATAATGGACA	ggaagtgtccctctgtagcta	aatgcagttggcatcagct:::tttaaattatttttcatggctctctggtag	gccaaaac
F. Cat	ccctcag	gtgagatatttt...4047...aatcacaattaacctgatta-	GAATAATGGACA	ggaagtgtccctctgtagcta	aatgcagttggcatcagct:::tttaaattatttttcatggctctctggtag	gccaaaac
B. Tau	ccctcag	gtgagatattcc...4420...aatcacaattaacctgatta-	GAATAATGGACA	ggaagtgtccctctgtagcta	aatgcagttggcatcagct:::tttaaattatttttcatggctctctggtag	gccaaaac
S. Sus	ccctcag	gtgagatattca...4208...agctgactgaaatcctttga-	TAATTtcTGCAcAGATggCTGG	-----	-----	gccaaaac
O. Avi	ccctcag	gtgagatattcc...4432...aatcacaattaacctgatta-	GAATAATGGACA	ggaagtgtccctctgtagcta	aatgcagttggcatcagct:::tttaaattatttttcatggctctctggtag	gccaaaac
L. Afr	ccccccag	gtgagatacccc...4819...aatcacaattaacctgatta-	GAATAATGGACA	ggaagtgtccctctgtagcta	aatgcagttggcatcagct:::tttaaattatttttcatggctctctggtag	gccaaaac

id=337272 gene=ENSG00000119042 name=SATB2 segment=chr2_200188682_200193420_-1 type=IN

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P. Tro	ttggcaaa	gacactaaagcg...2151...tgccaatta--caatgcatata----	TGTCTATtTATTC	----aatatctgtcatataaatatc-...254...aacgcattcaat	aaatatga
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C. Jac	ttggcaaa	gacactaaagcg...2159...tgccaatta--caatgcatata----	TGTCTATtTATTC	----aatatctgtcatataaatatc-...249...aacgcattcaat	aaatatga
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B. Tau	ttggcaaa	gacactaaaagt...2142...tgccaatta--caatgcatata----	TGTCTATtTATTC	----aatatctgtcatataaatatc-...253...aacgcattcaaa	aaatatga
S. Sus	ttggcaaa	gacactaaaagt...2158...-catttttagcctgtggtcttg	CCAGATCTtTGCGAATTA	caatgcatatgctc-----tattt...274...aacgcattaaaa	aaatatga
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L. Afr	ttggcaaa	gacactaaaagt...2219...tgccaatta--caatgcatata----	TGTCTATtTATTC	----aatatctgtcatataaatatc-...254...aacgcattcaat	aaatatga

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Figure 694:



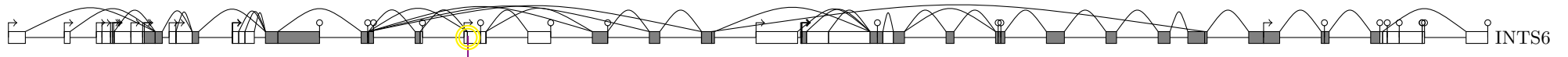
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P.Tro	ttggcaaa	gacctaaagcg...2413...ttatgtgcattgttaggctg	TTAGAATTTTT	tGGTTG	ttaaaat-aaacgcattcaat	aaatatga
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C.Por	ttggcaga	gacttccgcg...2099...ttatgtgcattgttaggctg	TTAGAATTTTT	tGGTTG	ttaaaataaaacgcattcaat	aaatctga
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O.Avi	ttggcaaa	gacctaaagtgt...2402...ttatgtgcattgttaggctg	TTAGAATTTTT	tGGTTG	ttaaaataaaacgcattcaaa	aaannnnn
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id=337280 gene=ENSG00000119042 name=SATB2 segment=chr2.200134231_200136697_-1 type=E3 VIEW

Figure 695:



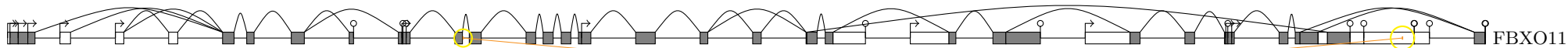
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R. Mac	cccccttt	gttttgtttggtggtttgatgttttt	TTCCTTcAG	CTAAAGGa
P. Tro	cccccttt	gttttgtttggtggtttgatgttttt	TTCCTTcAG	CTAAAGGa
P. Abe	cccccttt	gttttgtttggtggtttgatgttttt	TTCCTTcAG	CTAAAGGa
C. Jac	cccccttt	gttttgttcggtggtttgatgttttt	TTCCTTcAG	CTAAAGGa
M. Mus	tccccctt	gttttgtttggtggtttgatgttttt	TTCCTTcAG	CTAAAGGa
R. Nor	cccccttt	gttttgtttggtggtttgatgttttt	TTCCTTcAG	CTAAAGGa
C. Por	cccccttt	gt---ttggttggtttgatgttttt	TTCCTTcAG	CTAAAGGa
O. Cun	cccccttt	gttttgtttggtggtttgatgttttt	CCTTcAG	CTAAAGGc
C. Fam	cccccttt	gttttgtttggtggtttgatgttttt	TTCCTTcAG	CTAAAGGa
B. Tau	cccccttt	gttttgtttggtggtttgatgttttt	TTCCTTcAG	CTAAAGGa
E. Cab	cccccttt	gttttgtttggtggtttgatgttttt	TTCCTTcAG	CTAAAGGa
S. Sus	cccccttt	gttttgtttggtggtttgatgttttt	TTCCTTcAG	CTAAAGGa
L. Afr	ccctctct	gttttgtttgtagttttgatgttttt	TTCCTTcAG	CTAAAGGa
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id=291115 gene=ENSG00000102786 name=INTS6 segment=chr13.51995471.51995510.-1 type=AN

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P. Tro	cCTTTcAG	CTAAAGGAG	cagcccagtggttttcaaga...118...agccttgctaa	tggttagc
P. Abe	cCTTTcAG	CTAAAGGAG	cagcccagtggttttcaaga...118...agccttgctaa	tggttagc
C. Jac	cCTTTcAG	CTAAAGGAG	cagcccagtggttttcaaga...118...agccttgctaa	tggttagc
M. Mus	cCTTTcAG	CTAAAGGAG	cagcccagtggttttcaaga...118...agccttgctaa	tggttagc
R. Nor	cCTTTcAG	CTAAAGGAG	cagcccagtggttttcaaga...118...agccttgctaa	tggttagc
C. Por	cCTTTcAG	CTAAAGGAG	cagcccagtggttttcaaga...118...agccttgctaa	tggttagc
O. Cun	cCTTTcAG	CTAAAGG	cgcagcccagtgattttcaa--...120...agccttgctaa	tggttagc
C. Fam	cCTTTcAG	CTAAAGGAG	cagcccagtggttttcaaga...118...agccttgctaa	tggttagc
B. Tau	cCTTTcAG	CTAAAGGAG	cagtcacagtggttttcaaga...118...agccttgctaa	tggttagc
E. Cab	cCTTTcAG	CTAAAGGAG	cagcccagtggttttcaaga...115...agccttgctaa	tggttagc
S. Sus	cCTTTcAG	CTAAAGGAG	caatccagtggttttcaaga...118...agccttgctaa	tggttagc
L. Afr	cCTTTcAG	CTAAAGGAG	cagcccagtggttttcaaga...118...agccttgctaa	tggttagc
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id=291116 gene=ENSG00000102786 name=INTS6 segment=chr13.51995312.51995470.-1 type=AN VIEW

Figure 696:



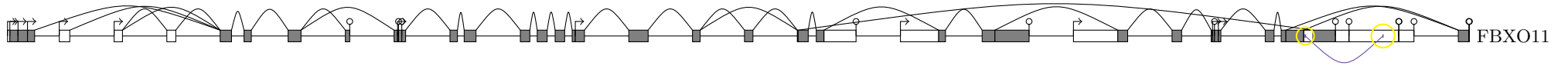
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R. Mac	at	ATGTTG	GTATGT	ttgatttttatttttatgac-----	...38...	atTTTTTTctag	tattatga
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P. Abe	at	ATGTTG	GTATGT	ttgatttttatttttatgac-----	...37...	TTTTTTTctag	tattatga
C. Jac	at	ATGTTG	GTATGT	tagattttgatttttatgac-----	...38...	atTTTTTTctag	tattatga
M. Mus	ac	ATGTTG	GTATGT	ttggcatattgggtttgtt-----	...186...	atTTTTTTctag	tattatga
R. Nor	ac	ATGTTG	GTATGT	ttgttttactttgtagttg-----	...323...	tgatttttctag	tattatga
C. Por	at	ATGTTG	GTATGTAT	-----ttttatgacctacatggcac...	...164...	atTCTTTTctag	tattatga
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C. Fam	at	ATGTTG	GTATGT	ttgattttgatttttataag-----	...40...	atTTTTTTctag	tattatga
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B. Tau	ac	ATGTTG	GTATGT	ttgattttgtcttttctaag-----	...56...	tgttgttttag	tactacga
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C. Jac	cta	atctt	aaattatatcca...382...	--aaacagcctgaaagtgtat	GCATGTACCA	taACAT	ctagacttaatatattgtgg...	.97...	gttattagatc	a---taatggt
M. Mus	cta	ac	aaattatatcca...379...	--taaacagcctgaaagtgtat	GCATGTACCA	taACAT	ctagacttaatatattgtgg...	.96...	gttattagatc	a---taatggt
R. Nor	cta	atctt	aaattatatcca...387...	--taaacagcctgaaagtgtat	GCATGTACCA	taACAT	ctagacttaatatattgtgg...	.96...	gttattagatc	a---taatggt
C. Por	cta	atctt	aaattatatcca...373...	tataaacagcctgaaagtgtat	ATGCATGTACCA	taACAT	ctagacttaatatattgtgg...	.97...	gttattagatc	a---taatggt
O. Cun	cta	atctt	aaattatatcca...392...	--taaacagcctgaaagtgtat	GCATGTACCA	taACAT	ctagacttaatatattgtgg...	.96...	gttattagatc	a---taatggt
C. Fam	cta	atctt	aaattatatcca...383...	--taaacagcctgaaagtgtat	GCATGTACCA	taACAT	ctagacttaatatattgtgg...	.96...	gttattagatc	a---taacggt
F. Cat	cta	atctt	aaattatatcca...380...	--taaacagcctgaaagtgtat	GCATGTACCA	taACAT	ctagacttaatatattgtgg...	.96...	gttattagatc	a---taatggt
B. Tau	cta	atctt	aaattatatcca...380...	--taaacagcctgaaagtgtat	GCATGTACCA	taACAT	ctagacttaatatattgtgg...	.96...	gttattagatc	a---taatggt
L. Afr	cta	atctt	aaattatatcca...378...	--taaacagcctgaaagtgtat	GCATGTACCA	taACAT	ctagacttaatatattgtgg...	.99...	---tattagatc	ataataatggt
	***	***	** *****		*****		*****		*	** ** *

id=45834 gene=ENSG00000138081 name=FBXO11 segment=chr2_48034063_48034622_-1 type=AN VIEW

Figure 697: CS=3.9



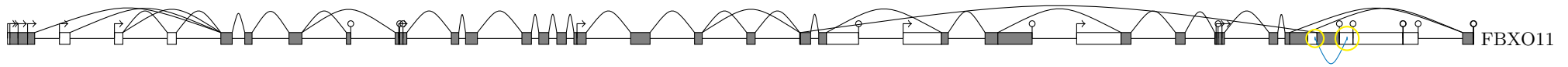
H.Sap	tacacaag	GTCAGT	tgACACT	ATGAA	gctcaagctacccaaaagaa...	.55...	aaagacttgaag	ggacagaa	
R.Mac	tacacaag	GTCAGT	tgACACT	ATGAA	gctcaagctacccaaaagaa...	.55...	aaagacttgaag	ggacagaa	
P.Tro	tacacaag	GTCAGT	tgACACT	ATGAA	gctcaagctacccaaaagaa...	.55...	aaagacttgaag	ggacagaa	
P.Abe	tacacaag	GTCAGT	tgACACT	ATGAA	gctcaagctacccaaaagaa...	.55...	aaagacttgaag	ggacagaa	
C.Jac	tacacaag	GTCAGT	tgACACT	ATGAA	gctcaagctacccaaaagaa...	.55...	aaagacttgaag	ggacagaa	
R.Nor	cacacaag	GTCAGT	tgACACT	ATGAA	gctcaagctacccaaaagaa...	.56...	aagactttgaag	ggacagaa	
C.Por	gatacaag	GTCAGT	tgACACT	ATGAA	gctcaagctacccaaaagaaa...	.56...	agacttttgag	ggacagaa	
O.Cun	tacacaag	GTCAGT	tgACACT	ATGAA	gctcaagctacccaaaagaa...	.57...	agacttttgag	ggacagaa	
C.Fam	tacacgag	GTCAGT	tgACACT	ATGAA	gctcaagctacccaaaagaa...	.57...	agacttttgag	ggacagaa	
F.Cat	tacacgag	GTCAGT	tgACACT	ATGAA	gctcaagctacccaaaagaa...	.57...	agacttttgag	ggacagaa	
B.Tau	tacacaag	GTCAGT	tgACACT	ATGAA	gctcaagctacccaaaagaa...	.57...	agacttttgag	ggacagaa	
E.Cab	tacacgag	GTCAGT	tgACACT	ATGAA	gctcaagctacccaaaagaa...	.57...	agacttttgag	ggacagaa	
O.Avi	tacacaag	GTCAGT	tgACACT	ATGAA	gctcaagctacccaaaagaa...	.57...	agacttttgag	ggacagaa	
L.Afr	aaatggag	GTCAGT	tgACACT	ATGAA	gctcaagctacccaaaagaa...	.57...	agacttttgag	ggacaaaa	
	*	**	*****				*	*** **	***** **

id=45831 gene=ENSG00000138081 name=FBXO11 segment=chr2.48035028.48035132.-1 type=AN

H.Sap	ctaactct	aaattatatcca...	.337...	---tcatagc-t---	tttctcccca	TTTATGTGATTGGT	gacagtgggtataaaacagc...	.144...	gtttattagatc---	ataatggt
R.Mac	ctaactct	aaattatatcca...	.336...	---tctagctt---	tccctcccca	TTTATGTGATTGGT	gacagtgggtataaaacagc...	.144...	gtttattagatc---	ataatggt
P.Tro	ctaactct	aaattatatcca...	.333...	---tcatagc-t---	tttctcccca	TTTATGTGATTGGT	gacagtgggtataaaacagc...	.144...	gtttattagatc---	ataatggt
P.Abe	ctaactct	aaattatatcca...	.334...	---tcatagc-t---	tttctcccca	TTTATGTGATTGGT	gacagtgggtataaaacagc...	.144...	gtttattagatc---	ataatggt
C.Jac	ctaactct	aaattatatcca...	.335...	---tcatagc-t---	tttctcccca	TTTATGTGATTGGT	gacagtgggtataaaacagc...	.145...	gtttattagatc---	ataatggt
R.Nor	ctaactct	aaattatatcca...	.341...	---tttcatagcgc-	cccccc--cca	TTTATGTGATTGGT	gacagtgggtat-aaacagcc...	.143...	gtttattagatc---	ataatggt
C.Por	ctaactct	aaattatatcca...	.328...	gtttcatagctc-	ccctacc-	CTTATGTGATTGGT	gacagtgggtat-aaacagcc...	.144...	gtttattagatc---	ataatggt
O.Cun	ctaactct	aaattatatcca...	.346...	---tttcataaac---	cccctccctca	TTTATGTGATTGGT	gacagtgggtat-aaacagcc...	.143...	gtttattagatc---	ataatggt
C.Fam	ctaactct	aaattatatcca...	.337...	---tagctcctcccc	cccccccca	TTTATGTGATTGGT	gacagtgggtat-aaacagcc...	.143...	gtttattagatc---	ataacggt
F.Cat	ctaactct	aaattatatcca...	.334...	---tcatagctc-	cccctcccca	TTTATGTGATTGGT	gacagtgggtat-aaacagcc...	.143...	gtttattagatc---	ataatggt
B.Tau	ctaactct	aaattatatcca...	.334...	---catagccc-	ccccccctcca	TTTATGTGATTGGT	gacagtgggtat-aaacagcc...	.143...	gtttattagatc---	ataatggt
E.Cab	ctaactct	aaattatatcca...	.332...	---atagctt-	ccccttacccca	TTTATGTGATTGGT	gacagtgggtat-aaacagcc...	.143...	gtttattagatc---	ataatggt
O.Avi	ctaactct	aaattatatcca...	.327...	---tttcatagccc-	cccccc--cca	TTTATGTGATTGGT	gacagtgggtat-aaacagcc...	.142...	agtttattagatc---	ataatggt
L.Afr	ctaactct	aaattatatcca...	.332...	---catagctt-	tttcccccca	TTTATGTGATTGGT	gacagtgggtat-aaacagcc...	.146...	---tattagatcata	ataatggt
	*****	*****		** *		*****	*****		* *****	**** **

id=45834 gene=ENSG00000138081 name=FBXO11 segment=chr2.48034063.48034622.-1 type=AN VIEW

Figure 698:



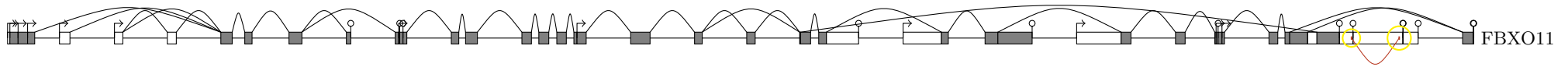
H.Sap	tacacaag	gtcagttgacac...37...attgactcaggatctcaaag	CTGGGTGT	TTAGCA	Attactgtgtaaagac--ttgaag	ggacagaa
R.Mac	tacacaag	gtcagttgacac...37...attgactcaggatctcaaag	CTGGGTGT	TTAGCA	Attactgtgtaaagac--ttgaag	ggacagaa
P.Tro	tacacaag	gtcagttgacac...37...attgactcaggatctcaaag	CTGGGTGT	TTAGCA	Attactgtgtaaagac--ttgaag	ggacagaa
P.Abe	tacacaag	gtcagttgacac...37...attgactcaggatctcaaag	CTGGGTGT	TTAGCA	Attactgtgtaaagac--ttgaag	ggacagaa
C.Jac	tacacaag	gtcagttgacac...37...attgactcaggatctcaaag	CTGGGTGT	TTAGCA	Attactgtgtaaagac--ttgaag	ggacagaa
C.Por	gatacaag	gtcagttgacac...37...attgactcaggatctcaaag	CTGGGTGT	TTAGCA	Attactgtgtaaagacttttgag	ggacagaa
O.Cun	tacacaag	gtcagttgacac...37...attgactcaggatctcagag	CTGGGTGT	TTAGCA	AttACGGTGAaagacttttgag	ggacagaa
C.Fam	tacacgag	gtcagttgacac...37...attgactcaggatctcaaag	CTGGGTGT	TTAGCA	Attactgtgtaaagacttttgag	ggacagaa
F.Cat	tacacgag	gtcagttgacac...37...attgactcaggatctcaaag	CTGGGTGT	TTAGCA	Attactgtgtaaagacttttgag	ggacagaa
B.Tau	tacacaag	gtcagttgacac...37...attgactcaggatctcaaag	CTGGGTGT	TTAGCA	Attactgtgtaaagacttttgag	ggacagaa
E.Cab	tacacgag	gtcagttgacac...37...attgactcaggatctcaaag	CTGGGTGT	TTAGCA	Attactgtgtaaagacttttgag	ggacagaa
O.Avi	tacacaag	gtcagttgacac...37...attgactcaggatctcaaag	CTGGGTGT	TTAGCA	Attactgtgtaaagacttttgag	ggacagaa
L.Afr	aaatggag	gtcagttgacac...37...attgactcaggatctcaaag	CTGGGTGT	TTAGCA	Attactgtgtaaagacttttgag	ggacaaaa
	*	**	*****	*****	*****	*****

id=45831 gene=ENSG0000138081 name=FBXO11 segment=chr2_48035028_48035132_-1 type=AN

H.Sap	atgatttt	aatgctttaatc...39...-----tacttgaatgtgccctgttt	TGTTAGc	ACACCTAG	acttgctgtaactgtactca...35...aacactaatcctt	aaattata
R.Mac	atgatttt	aatgctttaatc...39...-----tacttgaatgtgccctgttt	TGTTAGc	ACACCTAG	acttgctgtaactgtactca...35...aacactaatcctt	aaattata
P.Tro	atgatttt	aatgctttaatc...39...-----tacttgaatgtgccctgttt	TGTTAGc	ACACCTAG	acttgctgtaactgtactca...35...aacactaatcctt	aaattata
P.Abe	atgatttt	aatgctttaatc...39...-----tacttgaatgtgccctgttt	TGTTAGc	ACACCTAG	acttgctgtaactgtactca...35...aacactaatcctt	aaattata
C.Jac	atgatttt	aatgctttaatc...39...-----tacttgaatgtgccctgttt	TGTTAGc	ACACCTAG	acttgctgtaactgtactca...35...aacactaatcctt	aaattata
C.Por	atgatttt	aatgctttaatc...39...-----tacttgaatgtgccctgttt	TGTTAGc	ACACCTAG	acttgctgtaactgtactca...35...aacactaatcctt	aaattata
O.Cun	atgatttt	aatgctttaatc...27...aaaatcttattgtacttga	TGTGcc	CTGTtt	TGTTAGcACACCTAGacttgctgtaactgtactca...35...aacactaatcctt	aaattata
C.Fam	atgatttt	aatgctttaatc...38...-----tacttgaatgtgccctgttt	TGTTAGc	ACACCTAG	acttgctgtaactgtactca...35...aacactaatcctt	aaattata
F.Cat	atgatttt	aatgctttaatc...38...-----tacttgaatgtgccctgttt	TGTTAGc	ACACCTAG	acttgctgtaactgtactca...35...aacactaatcctt	aaattata
B.Tau	atgatttt	aatgctttaatc...39...-----tacttgaatgtgccctgttt	TGTTAGc	ACACCTAG	acttgctgtaactgtactca...35...aacactaatcctt	aaattata
E.Cab	atgatttt	aatgctttaatc...40...-----tacttgaatgtgccctgttt	TGTTAGc	ACACCTAG	acttgctgtaactgtactca...35...aacactaatcctt	aaattata
O.Avi	atgatttt	aatgctttaatc...39...-----tacttgaatgtgccctgttt	TGTTAGc	ACACCTAG	acttgctgtaactgtactca...35...aacactaatcctt	aaattata
L.Afr	atgatttt	aatgctttaatc...39...-----tacttgaacgtgccctgttt	TGTTAGc	ACACCTAG	acttgctgtaactgtactca...35...aacactaatcctt	aaattata
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id=45833 gene=ENSG0000138081 name=FBXO11 segment=chr2_48034623_48034775_-1 type=AN VIEW

Figure 699:



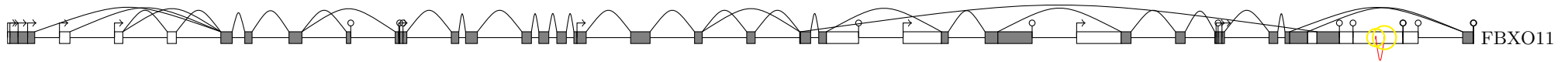
H. Sap	atgatttt	aatgctttaatc...88...-tactcatgtcccagatgatga	CGTTCCTTTC	TA	GAAA	-----gagaa-aacactaatctt	aaattata
R. Mac	atgatttt	aatgctttaatc...88...-tactcatgtcccagatgatga	CGTTCCTTTC	TAT	GAAA	-----gagaa-aacactaatctt	aaattata
P. Tro	atgatttt	aatgctttaatc...88...-tactcatgtcccagatgatga	CGTTCCTTTC	TA	GAAA	-----gagaa-aacactaatctt	aaattata
P. Abe	atgatttt	aatgctttaatc...88...-tactcatgtcccagatgatga	CGTTCCTTTC	TA	GAAA	-----gagaa-aacactaatctt	aaattata
C. Jac	atgatttt	aatgctttaatc...88...-tactcatgtcccagatgatga	CGTTCCTTTC	TA	GAAA	-----gagaa-aacactaatctt	aaattata
M. Mus	atgatttt	aatgctttaatc...65...acaccta-gacttgctgtaac	TGTA	CTCATG	TCCAGT	ATGTAccttctttctatgaaagagaaaaaacactaacctt	aagtata
R. Nor	atgatttt	aatgctttaatc...86...gtactcatgtcccag-atgta	CGTTCCTTTC	TA	GAAA	-----gagaaaaaacactaatctt	aaattata
C. Por	atgatttt	aatgctttaatc...88...-tactcatgtcccagatgatga	CGTTCCTTTC	TA	GAAA	-----gagaa-aacactaatctt	aaattata
O. Cun	atgatttt	aatgctttaatc...88...-tactcatgtcccagatgatga	CGTTCCTTTC	TA	GAAA	-----gagaa-aacactaatctt	aaattata
C. Fam	atgatttt	aatgctttaatc...87...-tactcatgtcccagatgatga	CGTTCCTTTC	TA	GAAA	-----gagaa-aacactaatctt	aaattata
F. Cat	atgatttt	aatgctttaatc...87...-tactcatgtcccagatgatga	CGTTCCTTTC	TA	GAAA	-----gagaa-aacactaatctt	aaattata
B. Tau	atgatttt	aatgctttaatc...88...-tactcatgtcccagatgatga	CGTTCCTTTC	TA	GAAA	-----gagaa-aacactaatctt	aaattata
E. Cab	atgatttt	aatgctttaatc...89...-tactcatgtcccagatgatga	CGTTCCTTTC	TA	GAAA	-----gagaa-aacactaatctt	aaattata
O. Avi	atgatttt	aatgctttaatc...88...-tactcatgtcccagatgatga	CGTTCCTTTC	TA	GAAA	-----gagaa-aacactaatctt	aaattata
L. Afr	atgatttt	aatgctttaatc...88...-tactcatgtcccagatgatga	CGTTCCTTTC	TA	GAAA	-----gagaa-aacactaatctt	aaattata
	*****	*****	** * * *	*	** **	**** *	**** ***** ** ** *****

id=45833 gene=ENSG00000138081 name=FBXO11 segment=chr2_48034623_48034775_-1 type=AN

H. Sap	ctaactct	aaattatatcca...471...taagaattaaagggt	-----	ttaa	-----	TTTC	TAGAAAG	aa	AATG	-----	:::::	catttttaaaaaataaagtttattagatc	---	ataatggt
R. Mac	ctaactct	aaattatatcca...470...taagaattaaagggt	-----	ttaa	-----	TTTC	TAGAAAG	aa	AATG	-----	:::::	catttttaaaaaataaagtttattagatc	---	ataatggt
P. Tro	ctaactct	aaattatatcca...467...taagaattaaagggt	-----	ttaa	-----	TTTC	TAGAAAG	aa	AATG	-----	:::::	catttttaaaaaataaagtttattagatc	---	ataatggt
P. Abe	ctaactct	aaattatatcca...468...taagaattaaagggt	-----	ttaa	-----	TTTC	TAGAAAG	aa	AATG	-----	:::::	catttttaaaaaataaagtttattagatc	---	ataatggt
C. Jac	ctaactct	aaattatatcca...469...taagaattaaagggt	-----	ttaa	-----	TTTC	TAGAAAG	aa	AATG	-----	:::::	catttttaaaaaataaagtttattagatc	---	ataatggt
M. Mus	ctaactct	aagttatatcca...337...-----agcgcccctccccattta	TGTGTAT	TTGGT	GACA	g	TGGGTATA	aacagcctgaaagtgtatgcatgtaccataacatctagac	:::::	catttttaaaaaataaagtttattagatc	---	ataatggt		
R. Nor	ctaactct	aaattatatcca...474...taagaattaaagggt	-----	ttaa	-----	TTTC	TAGAAAG	aa	AATG	-----	:::::	catttttaaaaaataaagtttattagatc	---	ataatggt
C. Por	ctaactct	aaattatatcca...462...taagaattaaagggt	-----	ttaa	-----	TTTC	TAGAAAG	aa	AATG	-----	:::::	catttttaaaaaataaagtttattagatc	---	ataatggt
O. Cun	ctaactct	aaattatatcca...479...taagaattaaagggt	-----	ttaa	-----	TTTC	TAGAAAG	aa	AATG	-----	:::::	catttttaaaaaataaagtttattagatc	---	ataatggt
C. Fam	ctaactct	aaattatatcca...470...taagaattaaagggt	-----	ttaa	-----	TTTC	TAGAAAG	aa	AATG	-----	:::::	catttttaaaaaataaagtttattagatc	---	ataatggt
F. Cat	ctaactct	aaattatatcca...467...taagaattaaagggt	-----	ttaa	-----	TTTC	TAGAAAG	aa	AATG	-----	:::::	catttttaaaaaataaagtttattagatc	---	ataatggt
B. Tau	ctaactct	aaattatatcca...467...taagaattaaagggt	-----	ttaa	-----	TTTC	TAGAAAG	aa	AATG	-----	:::::	catttttaaaaaataaagtttattagatc	---	ataatggt
E. Cab	ctaactct	aaattatatcca...465...taagaattaaagggt	-----	ttaa	-----	TTTC	TAGAAAG	aa	AATG	-----	:::::	catttttaaaaaataaagtttattagatc	---	ataatggt
O. Avi	ctaactct	aaattatatcca...460...taagaattaaagggt	-----	ttaa	-----	TTTC	TAGAAAG	aa	AATG	-----	:::::	catttttaaaaaataaagtttattagatc	---	ataatggt
L. Afr	ctaactct	aaattatatcca...465...taagaattaaagggt	-----	ttaa	-----	TTTC	TAGAAAG	aa	AATG	-----	:::::	catttttaaaaaataaagtttattagatc	ataatggt	ataatggt
	**** **	** *****	** *	** *	**	**	** * * *	**	***** ***** ** ** *****	**** **				

id=45834 gene=ENSG00000138081 name=FBXO11 segment=chr2_48034063_48034622_-1 type=AN VIEW

Figure 700:



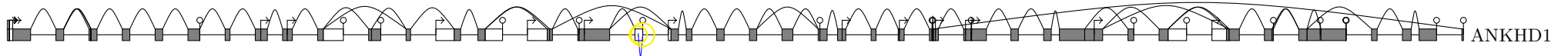
H. Sap	ctaactct	aaattatatcca...209...aaacaacagtcctgtatt	TGAActCTGTtcATAG	ttttttttgacagtttag...271...gtttattagatc---	ataatggt
P. Tro	ctaactct	aaattatatcca...205...cttcaaacagtcctgtatt	TGAActCTGTtcATAG	ttttttttgacagtttag...271...gtttattagatc---	ataatggt
P. Abe	ctaactct	aaattatatcca...206...cttcaaacagtcctgtatt	TGAActCTGTtcATAG	ttttttttgacagtttag...271...gtttattagatc---	ataatggt
C. Jac	ctaactct	aaattatatcca...209...cttcaaacagtcctgtatt	TGAActCTGTtcATAG	ttttttttgacagtttag...270...gtttattagatc---	ataatggt
M. Mus	ctaactct	aagttatatcca...205...cttcaaacagtcctgtatt	TGAActCTGTtcATAG	ttttttttgacagtttag...270...gtttattagatc---	ataatggt
R. Nor	ctaactct	aaattatatcca...215...cttcaaacagtcctgtatt	TGAActCTGTtcATAG	ttttttttgacagtttag...268...gtttattagatc---	ataatggt
C. Por	ctaactct	aaattatatcca...206...cttcaaacagtcctgtatt	TGAActCTGTtcATAG	ttttttttgacagtttag...266...gtttattagatc---	ataatggt
O. Cun	ctaactct	aaattatatcca...218...cttcaaacagtcctgtatt	TGAActCTGTtcATAG	ttttttttgacagtttag...270...gtttattagatc---	ataatggt
C. Fam	ctaactct	aaattatatcca...205...cttcaaacagtcctgtatt	TGAActCTGTtcATAG	ttttttttgacagtttag...274...gtttattagatc---	ataatggt
F. Cat	ctaactct	aaattatatcca...206...cttcaaacagtcctgtatt	TGAActCTGTtcATAG	ttttttttgacagtttag...270...gtttattagatc---	ataatggt
B. Tau	ctaactct	aaattatatcca...206...cttcaaacagtcctgtatt	TGAActCTGTtcATAG	ttttttttgacagtttag...270...gtttattagatc---	ataatggt
E. Cab	ctaactct	aaattatatcca...203...cttcaaacagtcctgtatt	TGAActCTGTtcATAG	ttttttttgacagtttag...271...gtttattagatc---	ataatggt
O. Avi	ctaactct	aaattatatcca...202...cttcaaacagtcctgtatt	TGAActCTGTtcATAG	ttttttttgacagtttag...266...gtttattagatc---	ataatggt
L. Afr	ctaactct	aaattatatcca...201...cttcaaacagtcctgtatt	TGAActCTGTtcATAG	ttttttttgacagtttag...276...---tattagatcata	ataatggt
		**** **	*****	***** * **	* ****

id=45834 gene=ENSG00000138081 name=FBXO11 segment=chr2_48034063_48034622_-1 type=AN

H. Sap	ctaactct	aaattatatcca...307...--agacaagtatatatacagcc	CTATACAGTTCA	tagcttttctccccatt...176...gtttattagatc---	ataatggt
P. Tro	ctaactct	aaattatatcca...303...--agacaagtatatatacagcc	CTATACAGTTCA	tagcttttctccccatt...176...gtttattagatc---	ataatggt
P. Abe	ctaactct	aaattatatcca...304...--agacaagtatatatacagcc	CTATACAGTTCA	tagcttttctccccatt...176...gtttattagatc---	ataatggt
C. Jac	ctaactct	aaattatatcca...305...tgagacaag--tatatacagcc	CTATACAGTTCA	tagcttttctccccatt...177...gtttattagatc---	ataatggt
M. Mus	ctaactct	aagttatatcca...303...--agaccagtatatatacagcc	CTATACAGTTCA	tagcgcctccccatt...175...gtttattagatc---	ataatggt
R. Nor	ctaactct	aaattatatcca...313...--agaccagtatatatacagcc	CTATACAGTTCA	tagcgcctccccatt...173...gtttattagatc---	ataatggt
C. Por	ctaactct	aaattatatcca...301...tgagaccag--tatatacagcc	CTATACAGTTCA	tagctccccctccccatt...174...gtttattagatc---	ataatggt
O. Cun	ctaactct	aaattatatcca...318...--acaagcatatatatacagcc	CTATACAGTTCA	taaccctccccatt...173...gtttattagatc---	ataatggt
C. Fam	ctaactct	aaattatatcca...304...--agacaagtatatatacagcc	CTATACAGTTCA	tagctccccctccccatt...178...gtttattagatc---	ataatggt
F. Cat	ctaactct	aaattatatcca...304...--agacaagtatatatacagcc	CTATACAGTTCA	tagctccccctccccatt...175...gtttattagatc---	ataatggt
B. Tau	ctaactct	aaattatatcca...303...--agacaagtatatatacagcc	CTATACAGTTCA	tagccccctccccatt...176...gtttattagatc---	ataatggt
E. Cab	ctaactct	aaattatatcca...300...--agacaagtatatatacagcc	CTATACAGTTCA	tagctccccctccccatt...177...gtttattagatc---	ataatggt
O. Avi	ctaactct	aaattatatcca...299...--agacaagtatatatacagcc	CTATACAGTTCA	tagccccctccccatt...172...gtttattagatc---	ataatggt
L. Afr	ctaactct	aaattatatcca...301...--agacaagtatatatacagcc	CTATACAGTTCA	tagcttttctccccatt...179...---tattagatcata	ataatggt
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id=45834 gene=ENSG00000138081 name=FBXO11 segment=chr2_48034063_48034622_-1 type=AN VIEW

Figure 701:



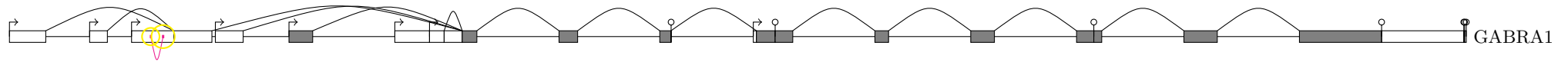
H. Sap	ccttgcag	cagtgggaaaacagtgcaattaatcatttaccttcctaaagatggctgg	TGAA	tgTATCA	CTCCA	tgagagcccaattcagaaat-...55...agtgatattcaa	aggcaggc
R. Mac	ccttgcag	cagtgggaaaacagtgcaattaatcatttaccttcctaaagatggctgg	TGAA	tgTATCA	CTCCA	tgagagcccagttcagaaat-...55...agtgatattcaa	aggcaggc
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P. Abe	ccttgcag	cagtgggaaaacagtgcaattaatcatttaccttcctaaagatggctgg	TGAA	tgTATCA	CTCCA	tgagagcccagttcagaaat-...55...agtgatattcaa	aggcaggc
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E. Cab	ccttgcag	cagtgggaaaacagtgcaattaatcatttaccttcctaaagatggctgg	TGAA	tgTATCA	CTCCA	tgagagcccagttcagaaat-...55...agtgatattcaa	aggcaggc
S. Sus	ccttgcag	cagtgggaaaacagtgcaattaatcatttaccttcctaaagatggctgg	TGAA	tgTATCA	CTCCA	tgagagcccagttcagtgat-...55...agtgatattcaa	aggcaggc
L. Afr	ccttgcag	cagtgggaaaacagtgcaattaatcatttaccttcctaaagatggctgg	TGAA	tgTATCA	CTCCA	tgagaaccagttcagaaat-...55...agtgatattcaa	aggcaggc
*****	*****	*****	*****	*****	*****	*****	*****

id=216290 gene=ENSG00000131503 name=ANKHD1 segment=chr5_139877623_139877775_1 type=AN

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R. Mac	ccttgcag	cagtgggaaaac...106...accaagaactaagatgtagc	TGGAGT	TGATATTCAa	aggcaggc
P. Tro	ccttgcag	cagtgggaaaac...106...accaagaactaagatgtagc	TGGAGT	TGATATTCAa	aggcaggc
P. Abe	ccttgcag	cagtgggaaaac...106...accaagaactaagatgtagc	TGGAGT	TGATATTCAa	aggcaggc
C. Jac	ccttgcag	cagtgggaaaac...106...accaagaactaagatgtagc	TGGAGT	TGATATTCAa	aggcaggc
M. Mus	ccttgcag	cagtgggaaaac...105...accaagaactaagatgtagc	TGGAGT	TGATATTCAa	aggcaggc
C. Por	ccttgcag	cagtgggaaaac...106...atcaagaactaagatgtagc	TGGAGT	TGATATTCAa	aggcaggc
O. Cun	ccttgcag	cagtgggaaaac...106...accaacaactaagatgtagc	TGGAGT	TGATATTCAa	aggcaggc
C. Fam	ccttgcag	cagtgggaaaac...106...accaagaactaagatgtagc	TGGAGT	TGATATTCAa	aggcaggc
B. Tau	ccttgcag	cagtgggaaaac...106...accaagaactaagatgtagc	TGGAGT	TGATATTCAa	aggcaggc
E. Cab	ccttgcag	cagtgggaaaac...106...accaagaactaagatgtagc	TGGAGT	TGATATTCAa	aggcaggc
S. Sus	ccttgcag	cagtgggaaaac...106...accaagaactaagatgtagc	TGGAGT	TGATATTCAa	aggcaggc
L. Afr	ccttgcag	cagtgggaaaac...106...accaagaactaagatgtagc	TGGAGT	TGATATTCAa	aggcaggc
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id=216290 gene=ENSG00000131503 name=ANKHD1 segment=chr5_139877623_139877775_1 type=AN VIEW

Figure 703:



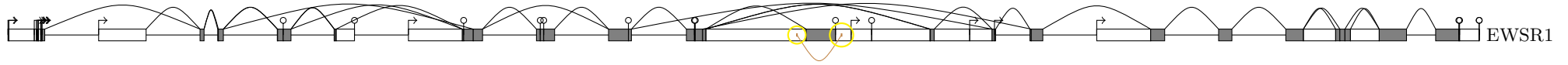
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R. Mac	ctcccccca aaaaagagaag-...72...taaattgtgctgcatataaa---AAATGGGCGGATTGGTctccagatccagaggctggt-----...106...ttgttgatag	ctgcagat
P. Tro	ctcccccc-aaaaagagaagc...71...taaattgtgctgcatataaa---AAATGGGCGGATTGGTctccagatccagaggctggt-----...106...ttgttgatag	ctgcagat
P. Abe	ctcccccc-aaaaagagaagc...71...taaattgtgctgcatataaa---AAATGGGCGGATTGGTctccagatccagaggctggt-----...106...ttgttgatag	ctgcagat
C. Jac	ctcccccca agaaggggaag-...72...taaattgtgctgcatataaa---AAATGGGCGGATTGGTctccagatccagaggctggt-----...106...ttgttgatag	ctgcagat
M. Mus	ttccccccc aaaaatagagga-...72...taaattgctgctgcatataaa---AAATGGGCGGATTgGTGTcCAGAtccagtggctggtaccacct...99...ttgttgatag	ctgcagat
R. Nor	ctccccccc aaaaatagagga-...75...taaattgctgctgcatataaa---AAATGGGCGGATTgGTGTcCAGAtccagtggctggtaccacct...99...ttgttgatag	ctgcagat
C. Por	actcccccc-aaaaagcaacc...71...taaattgtgctgcatataat---AAATGGGCGGATTGGTctccagatccagaggctggt-----...106...ttgttgatag	ctgcagat
O. Cun	ctcctctcc-aaaagggaaagc...71...taaattgtgctgcatataaa---AAATGGGCGGATTGGTctccagatccagaggctggt-----...106...ttgttgatag	ctgcagat
C. Fam	tccccacca aaaaaaaaaa...98...taaattgtgctgcatataaa---AAATGGGCGGATTGGTctccagatccagaggctggt-----...106...ttgttgatag	ctgcagat
F. Cat	ctccccaca aaaaagggaa-...74...taaattgtgctgcatataaa---AAATGGGCGGATTGGTctccagatccagaggctggt-----...106...ttgttgatag	ctgcagat
B. Tau	-cccccca aaaaagggaaagc...70...taaattgtgctgcaataaa---AAATGGGCGGATTGGTctccagatccagaggctggt-----...106...ttgttgatag	ctgcagat
E. Cab	-ttcccccc aaaaagggaaagc...71...taaattgtgctgcatataaa---AAATGGGCGGATTGGTctccagatccagaggctggt-----...104...ttgttgatag	ctgcagat
S. Sus	ctcccccca aaaaaggaag-...70...-aaattgtgctgcatataaaa---AATGGGCGGATTGGTctccagatccagaggctggt-----...106...ttgttgatag	ctgcagat
L. Afr	acccccca aaaaagggag-...78...---tgcgctgcatttaaaaaaAAATGGGCGGATTGGTctccagatcgaggctggt-----...106...ttgttgatag	ctgcagat
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id=31374 gene=ENSG0000022355 name=GABRA1 segment=chr5.161274940.161275196.1 type=A5

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R. Mac	ctcccccca aaaaagagaag-...146...-----ataaatctctctgcatgaAGTCACCGCCTATTTcacatccggtttgccctggg...33...ttgttgatag	ctgcagat
P. Tro	ctcccccc-aaaaagagaagc...145...-----ataaatctctctgcatgaAGTCACCGCCTATTTcacatccggtttgccctggg...33...ttgttgatag	ctgcagat
P. Abe	ctcccccc-aaaaagagaagc...145...-----ataaatctctctgcatgaAGTCACCGCCTATTTcacatccggtttgccctggg...33...ttgttgatag	ctgcagat
C. Jac	ctcccccca agaaggggaag-...146...-----ataaatctctctgcatgaAGTCACCGCCTATTTcacatccggtttgccctggg...33...ttgttgatag	ctgcagat
M. Mus	aaaaatagagga-...136...cctttctaaataaaatctcTCTGGCATgaAGTCacCGCCTATTTcacatccggtttgcctggg...33...ttgttgatag	ctgcagat
R. Nor	ctccccccc aaaaatagagga-...139...cctttctaaataaaatctcTCTGGCATgaAGTCacCGCCTATTTcacatccggtttgcctggg...33...ttgttgatag	ctgcagat
C. Por	actcccccc-aaaaagcaacc...145...-----ataaatctctctgcatgaAGTCACCGCCTATTTcacatccggtttgccctggg...33...ttgttgatag	ctgcagat
O. Cun	ctcctctcc-aaaagggaaagc...145...-----ataaatctctctgcatgaAGTCACCGCCTATTTcacatccggtttgccctggg...33...ttgttgatag	ctgcagat
C. Fam	tccccacca aaaaaaaaaa...172...-----ataaatctctctgcatgaAGTCACCGCCTATTTcacatccggtttgccctggg...33...ttgttgatag	ctgcagat
F. Cat	ctccccaca aaaaagggaa-...148...-----ataaatctctctgcatgaAGTCACCGCCTATTTcacatccggtttgccctggg...33...ttgttgatag	ctgcagat
B. Tau	-cccccca aaaaagggaaagc...144...-----ataaatctctctgcatgaAGTCACCGCCTATTTcacatccggtttgccctggg...33...ttgttgatag	ctgcagat
E. Cab	-ttcccccc aaaaagggaaagc...145...-----ataaatctctctgcatgaAGTCACCGCCTATTTcacatccggtttgccctggg...31...ttgttgatag	ctgcagat
S. Sus	ctcccccca aaaaaggaag-...143...-----ataaatctctctgcatgaAGTCACCGCCTATTTcacatccggtttgccctggg...34...ttgttgatag	ctgcagat
L. Afr	acccccca aaaaagggag-...152...-----ataaatctctctgcatgaAGTCACCGCCTATTTcacatccggtttgccctggg...33...ttgttgatag	ctgcagat
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id=31374 gene=ENSG0000022355 name=GABRA1 segment=chr5.161274940.161275196.1 type=A5 VIEW

Figure 704:



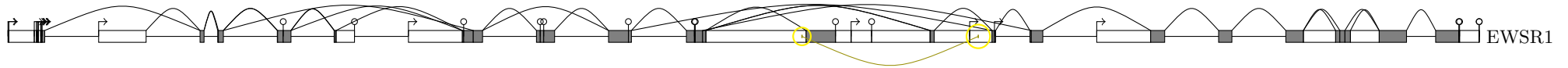
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C. Jac	ggaatggg	gtaagagcaaac...1480...	gtcttctgcaggtaaggcac	TCAAtGTTGTTaaCATGCCTTT	ttcattgcctcagatattttg--...53...	tatatgctacag	gttacaaa
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R. Nor	ggaatggg	gtaagagcaaac...1433...	gtctgctgcaggtaaggcgc	TCAAtGTTGTTaaCATGCCTTT	ttcattgcctcagatattttg--...54...	tatatgctacag	gttacaaa
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O. Cun	ggaatggg	gtaagagcaaac...1510...	gtcttctgcaggtaaggcac	TCAAtGTTGTTaaCATGCCTTT	ttcattgcctcagatattttg--...53...	tatatgctacag	gttacaaa
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id=632646 gene=ENSG0000182944 name=EWSR1 segment=chr22_29684776_29686401.1 type=AN

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R. Mac	tgttt--aaa	gagagagaacat	tttatggtgtgtactttt	aaaaaggaaac	AAAGctGCATGcAACAGCTTGA	aattgtatattcaggtatta-...50...	cctttatttaat	ttaaaga
P. Tro	tgttt--aaa	gagagagaacat	tttatggtgtgtactttt	aaaaaggaaac	AAAGctGCATGcAACAGCTTGA	aattgtatattcaggtatta-...50...	cctttatttaat	ttaaaga
P. Abe	tgttt--aaa	gagagagaacat	tttatggtgtgtactttt	aaaaaggaaac	AAAGctGCATGcAACAGCTTGA	aattgtatattcaggtatta-...54...	cctttatttaat	ttaaaga
C. Jac	tgttt--aaa	gagagagaacat	tttatggtgtgtactttt	aaaaaggaaac	AAAGctGCATGcAACAGCTTGA	aattgtatattcaggtatta-...50...	cctttatttaat	tctgaaga
M. Mus	--ttaaaga	gagagagacat	tttatggtgtgtactttt	aaacaggagt	AAAGctGCATGcAACAGCTTGG	-actgtgatctcaggtatta-...51...	cctctattcact	actagaaa
R. Nor	tgtttgaaga	gagagagaacat	tttatggtgtgtactttt	aaaaaggaagt	AAAGctGCATGcAACAGCTTGA	-aatgtatattcaggtatta-...49...	cctttatttact	cctagaaa
C. Por	tgttt--aaa	gagagagaacat	tttatggtgtgtactttt	aaaaaggaagcgc	AAAGctGCATGcAACAGCTTGA	aattgtatattcaggtatta-...49...	cctttgttact	ctttaaaga
O. Cun	tgttt--aaa	gagagagaacat	tttatggtgtgtactttt	aaaaaggaagcgc	AAAGctGCATGcAACAGCTTGA	cattgtatattcaggtatta-...46...	gctgccttaat	ttaaaga
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B. Tau	tgttt--aaa	gagagagaacat	tttatggtgtgtactttt	aaaaaggaagcgc	AAAGctGCATGcAACAGCTTGA	aattgtatattcaggtatta-...45...	gctgcctttat	ttaaaga
S. Sus	tgttt--aaa	gagagagaacat	tttatggtgtgtactttt	aaaaaggaagcgc	AAAGctGCATGcAACAGCTTGA	aattgtatattcaggtatta-...61...	atttacttaat	ttaaaga
L. Afr	tgttt--aaa	gagagagaacat	tttatggtgtgtactttt	aaaaaggaagcgc	AAAGctGCATGcAACAGCTTGA	aattgtatattcaggtatta-...50...	cctttatttaat	ttaaaga
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id=632648 gene=ENSG0000182944 name=EWSR1 segment=chr22_29686674_29686818.1 type=AN VIEW

Figure 705:



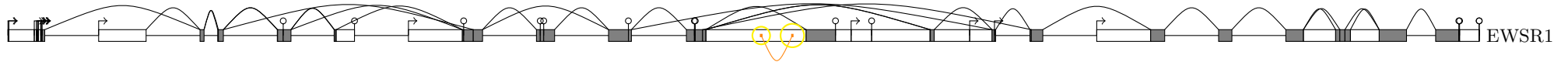
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C. Jac	ggaatggg	gtaagagcaaac...1535...----	gtatnttgata-ttttcattg	GCTGTAAACGTGGA	aacttttaacatgctttgtcgatttatatgctacag	gttacaaa
R. Nor	ggaatggg	gtaagagcaaac...1489...----	tatnttgata-ttttcattg	GCTGTAAACGTGGA	aacttttaacatgctttgtcgatttatatgctacag	gttacaaa
C. Por	ggaatggg	gtaagagcaaac...1533...ctcagt	atnttgata-ttttcattg	ATTGGCTGTAAACGTGGA	aacttttaacatgctttgtcgatttatatgctacag	gttacaaa
O. Cun	ggaatggg	gtaagagcaaac...1565...----	gtatnttgata-ttttcattg	GCTGTAAACGTGGA	aacttttaacatgctttgtcgatttatatgctacag	gttacaaa
C. Fam	ggaatggg	gtaagagcaaac...1578...----	gtatnttgata-ttttcattg	GCTGTAAACGTGGA	aacttttaacatgctttgtcgatttatatgctacag	gttacaaa
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B. Tau	ggaatggg	gtaagagcaaac...1533...----	gtatnttgata-ttttcattg	GCTGTAAACGTGGA	aacttttaacatgctttgtcgatttatatgctacag	gttacaaa
E. Cab	ggaatggg	gtaagagcaaac...1464...----	gtatnttgata-ttttcattg	GCTGTAAACGTGGA	aacttttaacatgctttgtcgatttatatgctacag	gttacaaa
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id=632646 gene=ENSG0000182944 name=EWSR1 segment=chr22_29684776_29686401.1 type=AN

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R. Mac	ggtttaga	agcaaaccagca...32...aatg	tt-aaagagcactgc	TCCATTTAGCAGT	gcggtcattttgagtttaa-----	..97...cctggttggcag	gacccatg
P. Tro	ggtttaga	agcaaaccagca...33...agat	ggtt-aaagagcactgc	TCCATTTAGCAGT	gcggtcattttgagtttaa-----	..97...cctggttggcag	gacccatg
P. Abe	ggtttaga	agcaaaccagca...33...aatg	tt-aaagagcactgc	TCCATTTAGCAGT	gcggtcattttgagtttaa-----	..97...cctggttggcag	gacccatg
C. Jac	ggtttaga	agcaaaccagca...32...aacg	tt-aaagagcactgc	TCCATTTAGCAGT	gcggtcattttgagtttaa-----	..97...cctggttggcag	gacccatg
R. Nor	ggtttaga	aacaaacgagca...28...aacg	ct-aaagggcactgc	TCCATTTAGCAGT	gcggtcattttgagtttaa-----	..96...cctggttggcag	gacccatg
C. Por	ggtttaga	agcaaatcagca...34...-aac	gttaaaagagcactgc	TCCATTTAGCAGT	CGGTtcattttgagtttaa-----	..92...cctggttggcag	gacccatg
O. Cun	ggtttaga	agcaaaccagca...33...aatg	ta-aaagagcactgc	TCCATTTAGCAGT	gcggtcattttgagtttaa-----	..97...cctggttggcag	gacccatg
C. Fam	ggtttaaa	agcaaaccagca...32...aatg	tt-aaagggcactgc	TCCATTTAGCAGT	gcggtcattttgagtttaa-----	..97...cctggttggcag	gacccatg
F. Cat	ggtttaaa	agcaaaccagca...33...aatg	tt-aaagggcactgc	TCCATTTAGCAGT	gcggtcattttgagtttaa-----	..97...cctggttggcag	gacccatg
B. Tau	ggtttaaa	agcaaacctgca...34...agat	ggtt-aaagggcactgc	TCCATTTAGCAGT	gcggtcattttgagtttaa-----	..97...cctggttggcag	gacccatg
E. Cab	ggtttaaa	agcaaaccagca...31...aatg	tt-aaagggcactgc	TCCATTTAGCAGT	gcggtcattttgagtttaa-----	..97...cctggttggcag	gacccatg
L. Afr	ggtttaaa	agcaaatcagca...25...-gat	ggtt-aaagggcactgc	CCATTTAGCAGT	gcggtcattttgagtttaa-----	..97...cctggttggcag	gacccatg
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id=632654 gene=ENSG0000182944 name=EWSR1 segment=chr22_29687918_29688125.1 type=AN VIEW

Figure 706:



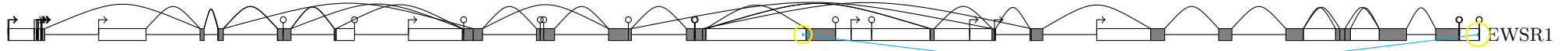
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R. Mac	ggaatggg	gtaagagcaaac...1141...-ggatgttttaaaatagacat	AGACACT	TGAAA	gtACTATCATCACGTC	tcaaatcacctagaattcct-----	...378...tatatgctacag	gttacaaa
P. Tro	ggaatggg	gtaagagcaaac...1157...-ggatgttttaaaatagacat	AGACACT	TGAAA	gtACTATCATCACGTC	tcaaatcacctagaattcct-----	...377...tatatgctacag	gttacaaa
P. Abe	ggaatggg	gtaagagcaaac...1157...-ggatgttttaaaatagacat	AGACACT	TGAAA	gtACTATCATCACGTC	tcaaatcacctagaattcct-----	...377...tatatgctacag	gttacaaa
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R. Nor	ggaatggg	gtaagagcaaac...1101...tggatgttttaaaatagaca	TAGACACT	TGAAA	gtACTATCATCACGTC	tcaaatcacctagaattcct-----	...380...tatatgctacag	gttacaaa
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C. Fam	ggaatggg	gtaagagcaaac...1187...-ggatgttttaaaatagacgt	AGACACT	TGAAA	gtACTATCATCACGTC	tcaaatcacctagaattcct-----	...384...tatatgctacag	gttacaaa
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B. Tau	ggaatggg	gtaagagcaaac...1144...ctgatgtttt-aaatagatgt	AGACACT	TGAAA	gtACTATCATCACGTC	tCAATcatttagactccttagtatt...376...tatatgctacag	gttacaaa	
E. Cab	ggaatggg	gtaagagcaaac...1137...-ggatgttttaaaatagacgt	AGACACT	TGAAA	gtACTATCATCACGTC	tCAATcacctagaattccttagtatt...314...tatatgctacag	gttacaaa	
S. Sus	ggaatggg	gtaagagcaaac...1170...tggatgtttt-aaatagatgt	AGACACT	TGAAA	gtACTATCATCACGTC	tCAATcacctagaattccttagtatt...373...tatatgctacag	gttacaaa	
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B. Tau	ggaatggg	gtaagagcaaac...1432...-tcccccgcccccttttttt	----	ATTG	GGTGTGGTGATGGTTTT	CAGTGTCT	tctgcaggtaaggcactcaa-...92...tatatgctacag	gttacaaa
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S. Sus	ggaatggg	gtaagagcaaac...1455...-ttccccctctctcttttttt	----	ATTG	GGTGTGGTGATGGTTTT	CAGTGTCT	tctgcaggtaaggcactcaa-...92...tatatgctacag	gttacaaa
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id=632646 gene=ENSG00000182944 name=EWSR1 segment=chr22_29684776_29686401_1 type=AN VIEW

Figure 707:



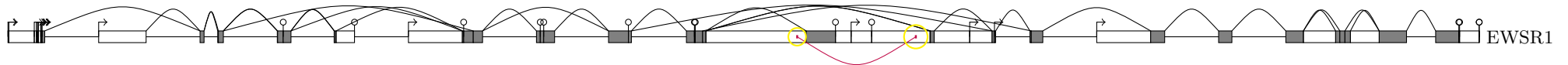
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S. Sus	ggaatggg	gtaagagcaaac...1561...ttgatatt-ttcattggctgt	TAAACGTGGAAac	TTTT	taacatgctttgtcgcatttatatgctacag	gttacaaa
L. Afr	ggaatggg	gtaagagcaaac...1539...ttgatatt-ttcattggctgt	TAAACGTGGAAac	TTTT	taacatgctttgtcgcatttatatgctacag	gttacaaa
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P. Abe	a	gtgtgcg	gagttttttttt...125...-tttttttttttttaaat	AAAATTCc	aaATGTTT	taaacagtc	atccttct
C. Jac	a	gtgtgcg	gagttttttttt...116...-tggttttttttttttaaat	AAAATTCc	aaATGTTT	taaacagtc	atccttct
M. Mus	a	gtgtgct	gagttttttttt...144...-tgtgatttttttttaaat	AAAATTCc	aaATGTTT	taaactgtc	atcctcct
R. Nor	a	gtgtgct	gagttttttttt...138...-tgtgatttttttttaaat	AAAATTCc	aaATGTTT	taaactgtc	atccttct
C. Por	a	gtgtgct	gagttttttttt...124...-tgtgcttttttttttaaat	AAAATTCc	aaATGTTT	taaacagtc	atccttct
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C. Fam	a	gtgtgcc	gagttttttttc...121...-gttttttttttttttaaat	AAAATTCc	aaATGTTT	taaacagtc	atccttct
F. Cat	a	gtgtgcc	gagttttttttc...138...-tttttttttttttttaaat	AAAATTCc	aaATGTTT	taaacagtc	atccttct
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L. Afr	a	gtgtgcc	gagtttttttcg...143...-tttttttttttttttaaat	AAAATTCc	aaATGTTT	taaaggttc	atccttct
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Figure 708:



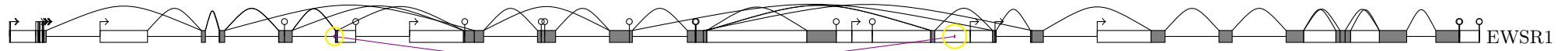
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P. Tro	ggaatggg	gtaagagcaaac...1492...-----tacaggaaggcactcaatg	TTGTTA	AcATGC	C-TTTTCA	ttgcctcagatatttgat	...49...tatatgctacag	gttacaaa	
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M. Mus	gggccctg	g-actgtatggct...374...gaaatttgagcaagctgcc	TGAAgAAAGGCAT	agTGACAA	gatgagagagatgcattg	-----...96...ttatccccccag	cagcgctg
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Figure 709:



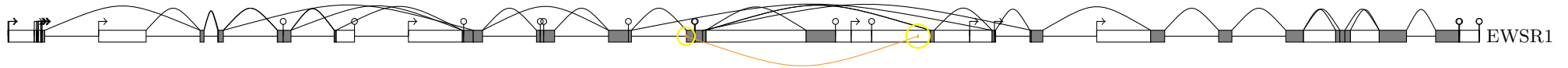
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P. Tro	tcccactg	gtaaggcctgcc...344...atctgatagtgtaccctcta	CTTTT	TGTTTTGTG	ctttccacag	tagaaggg
P. Abe	tcccactg	gtaaggcctgcc...341...atctgatagtgtaccctcta	CTTTT	TGTTTTGTG	ctttccacag	tagaaggg
C. Jac	tcccactg	gtaaggcctgcc...356...atctgatagtgtaccctcta	CTTTT	TGTTTTGTG	ctttccacag	tagaaggg
M. Mus	tcccactg	gtaaggccagcc...325...atctgatagtgtaccctcta	CTTTT	TGTTTTGTG	ctttccacag	tagaaggg
R. Nor	tcccactg	gtaagaccagcc...315...atctgatagtgtaccctcta	CTTTT	TGTTTTGTG	ctttccacag	tagaaggg
C. Por	tcccactg	gtaagacctacc...503...atctgatagtgtaccctcta	CTTTT	TGTTTTGTG	ctttccacag	tagaaggg
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C. Fam	tcccactg	gtaaggcctgcc...352...atctgatagtgtaccctcta	CTTTT	TGTTTTGTG	ctttccacag	tagaaggg
F. Cat	tcctgctg	gtaaggcctgcc...2764...ntctgatagtgtaccctcta	CTTTT	TGTTTTGTG	ctttccacag	tagaaggg
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R. Mac	gcctgggtg	gtaagtttttga...143...taataaggttaacctatggt	TACAAAACAAAGG	gtaacttgaagtattgagta...114...taatggtttaga	agcaaac
P. Tro	gcctgggtg	gtaagtttttga...137...taataaggttaacctatggt	TACAAAACAAAGG	gtaacttgaagtattgagta...114...taatggtttaga	agcaaac
P. Abe	gcctgggtg	gtaagtttttga...138...taataaggttaacctatggt	TACAAAACAAAGG	gtaacttgaagtattgagta...114...taatggtttaga	agcaaac
C. Jac	gcctgggtg	gtaagtttttga...138...taataaggttaacctatggt	TACAAAACAAAGG	gtaacttgaagtattgagta...114...taatggtttaga	agcaaac
M. Mus	gcctgggtg	gtaagtttttga...138...taataaggttaacctatggt	TACAAAACAAAGG	gtaacttcaagtattgagca...114...taatggtttaga	aacaaacg
R. Nor	gcctgggtg	gtaagtttttga...136...taataaggttaacctatggt	TACAAAACAAAGG	gtaacttcacgtattgagca...114...taatggtttaga	aacaaacg
C. Por	gcctgggtg	gtaagtttttga...135...taataaggttaacctatggt	TACAAAACAAAGG	gtaacttgaagtattgagca...112...taatggtttaga	agcaaatc
O. Cun	gcctgggtg	gtaagtttttga...137...taataaggttaacctatggt	TACAAAACAAAGG	gtaacttgaaggattgagca...113...taatggtttaga	agcaaac
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L. Afr	gcctgggtg	gtaagtttttga...135...taataaggttaacctatggt	TACAAAACAAAGG	gtaacgcaagtattgagca...115...taatggtttaa	agcaaatc
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Figure 710: CS=7.2



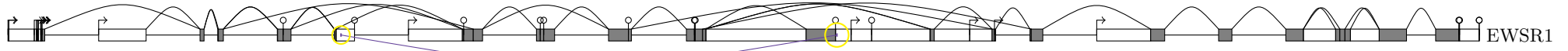
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P. Abe	gcagcaga	gtgagttgctaa...1434...	-atgctggtccatggcttaca	GATGTGacTCTTTcCTCAg	gttcattc
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M. Mus	gcagcaga	gtgagttgctaa...875...	-atgctggtccgtggcttaca	GATGTGacTCTTTcCTCAg	gttcattc
R. Nor	gcagcaga	gtgagttgctaa...1051...	aatgctggt-tgtggcttaca	GATGTGacTCTTTcCTCAg	gttcattc
C. Por	gcagcaga	gtgagttgctaa...991...	-atgctggtccatggcttaca	GATGTGacTCTTTcCTCAg	gttcattc
O. Cun	gcagcaga	gtgagtcgctga...825...	-gtgctgatccatggcttaca	GATGTGacTCTTTcCTCAg	gttcattc
C. Fam	gcagcaga	gtgagttgctaa...785...	-atgctggtccatggcttaca	GATGTGacTCTTTcCTCAg	gttcattc
F. Cat	gcagcaga	gtgagttgctaa...959...	-atgctggtccatggcttaca	GATGTGacTCTTTcCTCAg	gttcattc
B. Tau	gcagcaga	gtgagttgctaa...838...	-atgctgatccatggcttaca	GATGTGacTCTTTcCTCAg	gttcattc
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S. Sus	gcagcaga	gtgagttgctaa...867...	-gtgctggtccatggcttaca	GATGTGacTCTTTcCTCAg	gttcattc
O. Avi	gcagcaga	gtnnnnnnnnnn...838...	-atgctgatccatggcttaca	GATGTGacTCTTTcCTCAg	gttcattc
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P. Tro	gtgccctg-	agatgtatggct...384...	agaaaggcatagtgacaaga	TGAGAGAGATGCATT	gtttggagatgtgttagcc-...79...	ttatccccccag	cagcgctg
P. Abe	gtgccctg-	agatgtatggct...383...	agaaaggcatagtgacaaga	TGAGAGAGATGCATT	gtttggagatgtgttagcc-...79...	ttatccccccag	cagcgctg
C. Jac	gttccctg-	agatgtatggct...384...	agaaaggcatagtgacaaga	TGAGAGAGATGCATT	gtttggagatgtgttagcc-...79...	ttatccccccag	cagcgctg
M. Mus	gggccctg-	gactgtatggct...397...	agaaaggcatagtgacaaga	TGAGAGAGATGCATT	gtttggagatgtgttagcc-...79...	ttatccccccag	cagcgctg
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F. Cat	-tgccgtga	aaatgtatggct...365...	agaaaggcatagtgacaaga	TGAGAGAGATGCATT	gtttggagatgtgttagcc-...79...	ttatccccccag	cagcgctg
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E. Cab	gtgccctg-	aaatgtatggct...384...	agaaaggcatagtgacaaga	TGAGAGAGATGCATT	gtttggagatgtgttagcc-...79...	ttatccccccag	cagcgctg
S. Sus	gtgccctg-	aagtgtatggct...378...	agaaaggcatagtgacaaga	TGAGAGAGATGCATT	gtttggagatgtg-ttagcca...78...	ttatccccccag	cagcgctg
O. Avi	gtgccctg-	aagcgtgtggct...377...	agaaaggcatagtgacaaga	TGAGAGAGATGCATT	gtttggagatgtgttagcc-...79...	ttatccccccag	cagcgctg
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Figure 711: CS=10.5



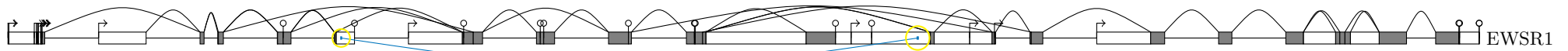
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R. Mac	cagtacag	gtttgactatcctgctcattcttg	CATGggAAATGCTTTCaTCTT	gtctaaccctgtaatgtaa...93...	gatccatgtcc--t	attcttta
P. Tro	cagtacag	gtttgactatcctgctcattcttg	CATGggAAATGCTTTCaTCTT	gtctaaccctgtaatgtaa...93...	gatccatgtcc--t	attcttta
P. Abe	cagtacag	gtttgactatcctgctcattcttg	CATGggAAATGCTTTCaTCTT	gtctaaccctgtaatgtaa...93...	gatccatgtcc--t	attcttta
C. Jac	cagtacag	gtttgactatcctgctcattcttg	CATGggAAATGCTTTCaTCTT	gtctaaccctgtaatgtaa...109...	gatccatgtcc--t	cttcttta
C. Por	cagtacag	gtttgactatcctgctcattcttg	CATGggAAATGCTTTCaTCTT	gtctaaccctgtaatgtaa...93...	gatgtgtgtcc--t	tttcttta
O. Cun	cagtacag	gtttgactatc--ctcattcttg	CATGggAAATGcTTTTCaTCTT	gtctaaccctgtaatgttta...92...	gctccatctcc--t	tttctata
C. Fam	cagtacag	gtttgactatcctgctcattcttg	CATGggAAATGCTTTCaTCTT	gtctaaccctgtaatgttac...92...	gatccatgtcc--t	tttctttg
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S. Sus	cagtacag	gtttgactatcctgctcattcttg	CATGggAAATGCTTTCaTCTT	gtctaaccctgtaatgtaa...95...	--tccatgtcctt	tttcttta
O. Avi	cagtacag	gtttgactatcctgctcattcttg	CATGggAAATGCTTTCaTCTT	gtctaaccctgtaatgtaa...95...	-atccatgtcc--t	tttcttta
L. Afr	cagtacag	gtttgactaccctgctcattcttg	CATGggAAATGCTTTCaTCTT	gtctaaccctaatgtaa...94...	gatccatgtcc--t	tttcttta
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P. Tro	tgtttaAA	GAGAGAGaaCATTTTATG	gtgtgtacttttaaaagga...95...	cctttatattaat	tttaaaga
P. Abe	tgtttaAA	GAGAGAGaaCATTTTATG	gtgtgtacttttaaaagga...95...	cctttatattaat	tttaaaga
C. Jac	tgtttaAA	GAGAGAGaaCATTTTATG	gtgtgtacttttaaaagga...94...	cctttatattaat	tctgaaga
C. Por	tgtttaAA	GAGAGAGaaCATTTTATG	gtgtgtacttttaaaagga...94...	cctttgtttact	ctttaaaa
O. Cun	tgtttaAA	GAGAGAGAAcATTTTATG	gtgtgtacttttaaaagga...91...	gctgcccttaat	tttaaac
C. Fam	tgtttaAA	GAGAGAGaaCATTTTATG	gtgtgtacttttaaaagga...95...	cctttatattaac	tttgaagg
F. Cat	tgtttaAA	GAGAGAGaaCATTTTATG	gtgtgtacttttaaaagga...95...	cctttatattaat	tttaaaga
B. Tau	tgtttaAA	GAGAGAGaaCATTTTATG	gtgtgtacttttaaaagga...90...	gctgcctttat	ttaaaga
S. Sus	tgtttaAA	GAGAGAGaaCATTTTATG	gtgtgtacttttaaaagga...106...	atcttacttaat	tttaaaga
O. Avi	tgtttaAA	GAGAGAGaaCATTTTATG	gtgtgtacttttaaaagga...90...	gctgcctttat	ttaaaga
L. Afr	tgtttaAA	GAGAGAGaaCATTTTATG	gtgtgtacttttaaaagga...95...	cctttatattaat	taaaaaa
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Figure 712:



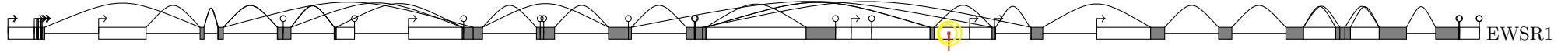
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R. Mac	cagtacag	gtttgactatcctgctcattcttgc	catggga	AATGCTTTCCATCTTGTCT	aaccctgtaatg	ttaac	cct...89...gatccatgtcc--t	attc	ttta
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L. Afr	cagtacag	gtttgactaccctgctcattcttgc	catggga	AATGCTTTCCATCTTGTCT	aaccctgtaatg	ttaac	cct...90...gatccatgtcc--t	tttc	ttta

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Figure 713:



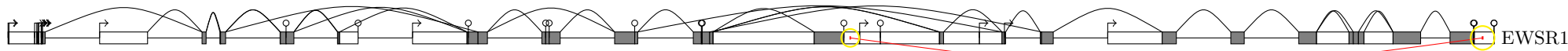
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C. Por	gcctggtg	gtaagttttgag	tattaccatggat	agtggtt:::tattagtttcataa	agtggtt	taaaatgaactatacaaaa	GAGACTAATGGGTA	TGCC	ggCATTGTCTT	agggg-taataagg	ttaacct...	150...	taatggtttaga	agcaaatc
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F. Cat	gcctggtg	gtaagttttgag	tattaccatggat	agtggtt:::ttattagtttcataa	agtggtt	taaaatgatctatacaaaa	GAGACTAATGGGTA	TGCC	ggCATTGTCTT	agggg-taataagg	ttaacct...	153...	taatggtttaga	agcaaacc
B. Tau	gcctggtg	gtaa-----	-----	-----	-----	-----	GTTTTTGAGTATTACCA	tgGATA	gTGTTT	aaaaaaaaatac	agtcagtt--	265...	taatggtttaga	agcaaatc
E. Cab	gcctggtg	gtaagttttgag	tattaccatggat	agtggtt:::ttattagtttcataa	agtggtt	taaaatgatctatacaaaa	GAGACTAATGGGTA	TGCC	ggCATTGTCTT	agggg-taataagg	ttaacct...	153...	taatggtttaga	agcaaacc
O. Avi	gcctggtg	gtaa-----	-----	-----	-----	-----	GTTTTTGAGTATTACCA	tgGATA	gTGTTT	aaaaaaaaatac	agtcagtt--	265...	taatggtttaga	agcaaatc
L. Afr	gcctggtg	gtaagttttgag	tattaccatggat	agtggtt:::ttattagtttcataa	agtggtt	taaaatgatctatacaaaa	GAGACTAATGGGTA	TGCC	ggCATTGTCTT	agggg-taataagg	ttaacct...	153...	taatggtttaga	agcaaatc
*****	*****	*****	*****	*****	*****	*****	* * * * *	* * * * *	* * * * *	*****	** *	*****	*****	* * * * *

id=632653 gene=ENSG00000182944 name=EWSR1 segment=chr22.29687589_29687917_1 type=AN

H. Sap	gcctggtg	gtaagttttga...82...	-taaaatgatctatacaaaa	---GAGACTAATGGGTA	TGCC	ggCATTGTCTT	aggggtaataagg	ttaacctatggtt	tcaaaa	caaaaggg:::gcattgag	agtgattt	ggttaatg	ggtttaga	agcaaacc
R. Mac	gcctggtg	gtaagttttga...88...	-taaaatgatctatacaaaa	---GAGACTAATGGGTA	TGCC	ggCATTGTCTT	agggg-taataagg	ttaacctatggtt	tcaaaa	caaaaggg:::gcattgag	agtgattt	ggttaatg	ggtttaga	agcaaacc
P. Tro	gcctggtg	gtaagttttga...82...	-taaaatgatctatacaaaa	---GAGACTAATGGGTA	TGCC	ggCATTGTCTT	agggg-taataagg	ttaacctatggtt	tcaaaa	caaaaggg:::gcattgag	agtgattt	ggttaatg	ggtttaga	agcaaacc
P. Abe	gcctggtg	gtaagttttga...83...	-taaaatgatctatacaaaa	---GAGACTAATGGGTA	TGCC	ggCATTGTCTT	agggg-taataagg	ttaacctatggtt	tcaaaa	caaaaggg:::gcattgag	agtgattt	ggttaatg	ggtttaga	agcaaacc
C. Jac	gcctggtg	gtaagttttga...83...	-taaaatgatctatacaaaa	---GAGACTAATGGGTA	TGCC	ggCATTGTCTT	agggg-taataagg	ttaacctatggtt	tcaaaa	caaaaggg:::gcattgag	agtgattt	ggttaatg	ggtttaga	agcaaacc
M. Mus	gcctggtg	gtaagttttga...83...	-taaaatgatctatacaaaa	---GAGACTAATGGGTA	TGCC	ggCATTGTCTT	agggg-taataagg	ttaacctatggtt	tcaaaa	caaaaggg:::gcattgag	agtgattt	ggttaatg	ggtttaga	aacaaacg
R. Nor	gcctggtg	gtaagttttga...81...	-taaaatgatctatacaaaa	---GAGACTAATGGGTA	TGCC	ggCATTGTCTT	agggg-taataagg	ttaacctatggtt	tcaaaa	caaaaggg:::gcattgag	agtgattt	ggttaatg	ggtttaga	aacaaacg
C. Por	gcctggtg	gtaagttttga...80...	-taaaatgaactatacaaaa	---GAGACTAATGGGTA	TGCC	ggCATTGTCTT	agggg-taataagg	ttaacctatggtt	tcaaaa	caaaaggg:::gactgag	agtgattt	ggttaatg	ggtttaga	agcaaatc
O. Cun	gcctggtg	gtaagttttga...82...	-taaaatgatctatacaaaa	---GAGACTAATGGGTA	TGCC	ggCATTGTCTT	agggg-taataagg	ttaacctatggtt	tcaaaa	caaaaggg:::gcattgag	agtgattt	ggttaatg	ggtttaga	agcaaacc
C. Fam	gcctggtg	gtaagttttga...79...	-taaaatgatctatacaaaa	---GAGACTAATGGGTA	TGCC	ggCATTGTCTT	agggg-taataagg	ttaacctatggtt	tcaaaa	caaaaggg:::gcattgag	agtgattt	ggttaatg	ggtttaga	agcaaacc
F. Cat	gcctggtg	gtaagttttga...80...	-taaaatgatctatacaaaa	---GAGACTAATGGGTA	TGCC	ggCATTGTCTT	agggg-taataagg	ttaacctatggtt	tcaaaa	caaaaggg:::gcattgag	agtgattt	ggttaatg	ggtttaga	agcaaacc
B. Tau	gcctggtg	gtaagttttga...273...	-atggcagctaagcactga	GAGTGTATTGGT	-----	tAATGTTTAAAGC	-----	-----	-----	-----	-----	-----	-----	aaact
E. Cab	gcctggtg	gtaagttttga...81...	-taaaatgatctatacaaaa	---GAGACTAATGGGTA	TGCC	ggCATTGTCTT	agggg-taataagg	ttaacctatggtt	tcaaaa	caaaaggg:::gcattgag	agtgattt	ggttaatg	ggtttaga	agcaaacc
O. Avi	gcctggtg	gtaagttttga...273...	-atggcagctaagcactga	GAGTGTATTGGT	-----	tAATGTTTAAAGC	-----	-----	-----	-----	-----	-----	-----	aaact
L. Afr	gcctggtg	gtaagttttga...80...	-taaaatgatctatacaaaa	---GAGACTAATGGGTA	TGCC	ggCATTGTCTT	agggg-taataagg	ttaacctatggtt	tcaaaa	caaaaggg:::gcattgag	agtgattt	ggttaatg	ggtttaga	agcaaatc
*****	*****	*****	*****	*****	*****	*****	* * * * *	* * * * *	* * * * *	*****	** *	*****	*****	* * * * *

id=632653 gene=ENSG00000182944 name=EWSR1 segment=chr22.29687589_29687917_1 type=AN VIEW

Figure 714:



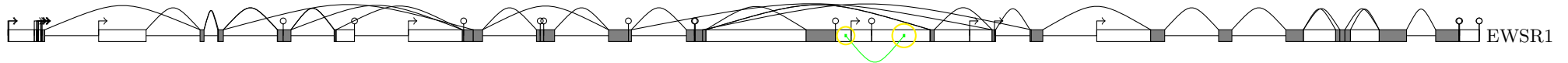
H.Sap	tgttt--aaa	gagagagaacat	tttatgggtgtg	tacttttaaaa	aggaacaaa	GCTGCATGCa	ACAG	cttgaaat	tgatattcagg-	..55..	cctttatt	taaat	tttaaaga			
R.Mac	tgttt--aaa	gagagagaac	at	tttatgggtgtg	tacttttaaaa	aggaacaaa	GCTGCATGCa	ACAG	cttgaaat	tgatattcagg-	..55..	cctttatt	taaat	tctaaaga		
P.Tro	tgttt--aaa	gagagagaac	at	tttatgggtgtg	tacttttaaaa	aggaacaaa	GCTGCATGCa	ACAG	cttgaaat	tgatattcagg-	..55..	cctttatt	taaat	tttaaaga		
P.Abe	tgttt--aaa	gagagagaac	at	tttatgggtgtg	tacttttaaaa	aggaacaaa	GCTGCATGCa	ACAG	cttgaaat	tgatattcagg-	..55..	cctttatt	taaat	tttaaaga		
C.Jac	tgttt--aaa	gagagagaac	at	tttatgggtgtg	tacttttaaaa	aggaacaaa	GCTGCATGCa	ACAG	cttgaaat	tgatattcagg-	..55..	cctttatt	taaat	tctgaaga		
M.Mus	--ttaaaga	gagagagag	c	at	tttatgggtgtg	tacttttaaca	aggaagtaaa	GCTGCATGCa	ACAG	cttg	actgtgtat	cttaggt	..56..	cctctatt	cact	actagaaa
R.Nor	tgtttgaaga	gagagagaac	at	tttatgggtgtg	tacttttaaaa	aggaagtaaa	GCTGCATGCa	ACAG	cttgaaa	-tgtatatt	taggt	..54..	cctttatt	tact	cctagaaa	
C.Por	tgttt--aaa	gagagagaac	at	tttatgggtgtg	tacttttaaaa	aggaagcaaa	AGCTGCATGCa	ACAG	cttgaaat	gtatactcagg-	..54..	cctttgtt	tact	ctttaa		
O.Cun	tgttt--aaa	gagagagaac	at	tttatgggtgtg	tacttttaaaa	aggaagcaaa	GCTGCATGCa	ACAG	cttgacatt	gtatattcagg-	..51..	gctgcc	ctta	taaac		
C.Fam	tgttt--aaa	gagagagaac	at	tttatgggtgtg	tacttttaaaa	aggaacaaa	GCTGCATGCa	ACAG	cttgaaat	tgatattcagg-	..55..	cctttatt	taaac	ttgaagg		
F.Cat	tgttt--aaa	gagagagaac	at	tttatgggtgtg	tacttttaaaa	aggaagaaa	GCTGCATGCa	ACAG	cttgaaat	gtatattcagg-	..55..	cctttatt	taaac	tttaaaga		
B.Tau	tgttt--aaa	gagagagaac	at	tttatgggtgtg	tacttttaaaa	aggaagcaaa	GCTGCATGCa	ACAG	cttgaaat	gtatattcagg-	..50..	gctgcc	cttt	taaac		
S.Sus	tgttt--aaa	gagagagaac	at	tttatgggtgtg	tacttttaaaa	aggaacaaa	GCTGCATGCa	ACAG	cttgaaat	gtatattcagg-	..66..	atttact	taaac	tttaaaga		
L.Afr	tgttt--aaa	gagagagaac	at	tttatgggtgtg	tacttttaaaa	aggaatcaaa	GCTGCATGCa	ACAG	cttgaaat	gtatattcagg-	..55..	cctttatt	taaac	taaaaa		
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id=632648 gene=ENSG0000182944 name=EWSR1 segment=chr22_2968674_29686818.1 type=AN

H.Sap	a	gtgtg	gag	tttt	-----	tttt	ctt	ctt	ttta	-----	aaa	at	ggt	gtt	---	ta	gact	tta	aca	at	ggg	aac	ccc	TTGT	ga	GCATG	ct	CAGT	-at	catt	gt	gg	aga	acca	aaga	...71..	tt	ata	aag	ag	tc	at	cct	tc				
R.Mac	a	gtgtg	gag	tttt	-----	tt	---	tt	cct	ctt	ttta	-----	aaa	at	ggt	gtt	---	ta	gact	tta	aca	at	ggg	aac	ccc	TTGT	ga	GCATG	ct	CAGT	-at	catt	gt	gg	aga	acca	aaga	...72..	aa	aca	aac	ag	tt	at	cct	tc		
P.Tro	a	gtgtg	gag	tttt	-----	tt	---	tt	cct	ctt	ttta	-----	aaa	at	ggt	gtt	---	ta	gact	tta	aca	at	ggg	aac	ccc	TTGT	ga	GCATG	ct	CAGT	-at	catt	gt	gg	aga	acca	aaga	...69..	tt	ata	aac	ag	tc	at	cct	tc		
P.Abe	a	gtgtg	gag	tttt	-----	tt	---	tt	cct	ctt	ttta	-----	aaa	at	ggt	gtt	---	ta	gact	tta	aca	at	ggg	aac	ccc	TTGT	ga	GCATG	ct	CAGT	-at	catt	gt	gg	aga	acca	aaga	...72..	tt	ata	aac	ag	tc	at	cct	tc		
C.Jac	a	gtgtg	gag	tttt	-----	tt	---	tt	cct	ctt	ttta	-----	aaa	at	ggt	gtt	---	ta	gac	-tta	aca	at	ggg	aat	ccc	TTGT	ga	GCATG	ct	CAGT	-aac	catt	gt	gg	aga	acca	aaga	...68..	tt	ata	aac	ag	tc	at	cct	tc		
M.Mus	a	gtgtg	gag	tttt	tttt	gtt	gtt	gtt	tttt	gatt	gtt	cttt	---	ttt	ct	tttt	---	aa	g	act	taa	-ca	at	ggg	aac	ccc	TTGT	ga	GCATG	ct	CAGT	-at	catt	gt	gg	aga	acca	aaga	...63..	tt	ata	aac	ag	tc	at	cct	ct	
R.Nor	a	gtgtg	gag	tttt	tttt	gtt	gtt	gtt	tttt	tttt	tttt	---	ttt	ct	tttt	---	aa	g	act	taa	-ca	at	ggg	aac	ccc	TTGT	ga	GCATG	ct	CAGT	-at	catt	gt	gg	aga	acca	aaga	...63..	tt	ata	aac	ag	tc	at	cct	ct		
C.Por	a	gtgtg	gag	tttt	tttt	gtt	gtt	gtt	tttt	tttt	tttt	---	ttt	ct	tttt	---	aa	g	act	taa	-ca	at	ggg	aac	ccc	TTGT	ga	GCATG	ct	CAGT	-at	catt	gt	gg	aga	acca	aaga	...62..	tt	ata	aac	ag	tc	at	cct	ct		
O.Cun	a	gtgtg	gag	tttt	tttt	gtt	gtt	gtt	tttt	tttt	tttt	---	ttt	ct	tttt	---	aa	g	act	taa	-ca	at	ggg	aac	ccc	TTGT	ga	GCATG	ct	CAGT	-at	catt	gt	gg	aga	acca	aaga	...62..	tt	ata	aac	ag	tc	at	cct	ct		
C.Fam	a	gtgtg	gag	tttt	tttt	gtt	gtt	gtt	tttt	tttt	tttt	---	ttt	ct	tttt	---	aa	g	act	taa	-ca	at	ggg	aac	ccc	TTGT	ga	GCATG	ct	CAGT	-at	catt	gt	gg	aga	acca	aaga	...69..	tt	ata	aac	ag	tc	at	cct	ct		
F.Cat	a	gtgtg	gag	tttt	tttt	gtt	gtt	gtt	tttt	tttt	tttt	---	ttt	ct	tttt	---	aa	g	act	taa	-ca	at	ggg	aac	ccc	TTGT	ga	GCATG	ct	CAGT	-at	catt	gt	gg	aga	acca	aaga	...86..	tt	ata	aac	ag	tc	at	cct	ct		
B.Tau	a	gtgtg	gag	ttt	-----	tt	---	tt	ct	tatt	ttta	---	aa	g	act	taa	-ca	at	ggg	aac	ccc	TTGT	ga	GCATG	ct	CAGT	-at	catt	gt	gg	aga	acca	aaga	...66..	tt	ata	aac	ag	tc	ac	cct	ct						
S.Sus	a	gtgtg	gag	tttt	tttt	gt	-----	tt	---	tt	tttt	cttt	---	aa	g	act	taa	-ca	at	ggg	aat	ccc	TTGT	ga	GCATG	ct	CAGT	-gt	ct	tt	gt	ga	aga	acca	aaga	...79..	tt	ata	aac	ag	tc	at	cct	ct				
L.Afr	a	gtgtg	gag	tttt	tttt	gtt	-----	tt	---	tt	ct	tttt	ta	ag	at	ggt	gtt	---	ta	g	act	taa	-ca	at	ggg	aac	ccc	TTGT	ga	GCATG	ct	CAGT	-gt	ct	gt	gg	aga	acca	aaga	...71..	tt	ata	aac	ag	tc	at	cct	ct
	*	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****			

id=632676 gene=ENSG0000182944 name=EWSR1 segment=chr22_29696334_29696514.1 type=EN VIEW

Figure 715:



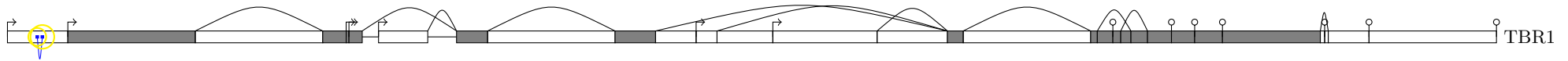
H. Sap	tggtttaa	gagagagaacat...44...-agcttgaattgtatattca	GGTATTAA	GGTGCAACTACTGGT	taga-aaaaa-ctcagggcctcccactgggga-gctgcc-----	tttattta	tttaaaga
R. Mac	tggtttaa	gagagagaacat...44...-agcttgaattgtatattca	GGTATTAA	GGTGCAACTACTGGT	taga-aaaaa-ctcagggcctcccactgggga-gctgcc-----	tttattta	tctaaaga
P. Tro	tggtttaa	gagagagaacat...44...-agcttgaattgtatattca	GGTATTAA	GGTGCAACTACTGGT	taga-aaaaa-ctcagggcctcccactgggga-gctgcc-----	tttattta	tttaaaga
P. Abe	tggtttaa	gagagagaacat...44...-agcttgaattgtatattca	GGTATTAA	GGTGCAACTACTGGT	taga-aaaaa-ctcagggcctcccactgggga-gctgcc-----	tttattta	tttaaaga
C. Jac	tggtttaa	gagagagaacat...43...-agcttgaattgtatattca	GGTATTAA	GGTGCAACTACTGGT	taga-aaaaa-ctcagggcctcccactgggga-gctgcc-----	tttattta	tctgaaga
M. Mus	tttaaaga	gagagagagacat...42...-cagcttgg-actgtgtatctca	GGTATTAA	GGTGCAACTACTGGT	taggagagagcctcagggctccgactgggga-gctgcc-----	tctattca	actagaaa
R. Nor	tgtttgaa	gagagagagaaac...45...-cagcttgaac-tgtatattca	GGTATTAA	GGTGCAACTACTGGT	taa--gagaacctcaagtcttctactgggga-gctacc-----	tttattta	cctagaaa
C. Por	tggtttaa	gagagagaacat...44...-agcttgaattgtatactca	GGTATTAA	GGTGCAACTACTGGT	taca-aacag-ctc--ggcctcccactgggagggtacc-----	tttattta	ctttaa
O. Cun	tggtttaa	gagagagaacat...44...-agcttgaattgtatattca	GGTATTAA	GGTGCAACTACTGGT	taga-aaaaa-ctcagggcctcccactgtgga-gctgcc-----	tttattta	tttaa
C. Fam	tggtttaa	gagagagaacat...44...-agcttgaattgtatattca	GGTATTAA	GGTGCAACTACTGGT	taga-aaaag-ctcagggcctcccactgagga-gctgcc-----	tttattta	tttgaagg
F. Cat	tggtttaa	gagagagaacat...44...-agcttgaactgtatattca	GGTATTAA	GGTGCAACTACTGGT	tagg-aaaag-ctcagggcctcccactgggga-gctgcc-----	tttattta	tttaaaga
B. Tau	tggtttaa	gagagagaacat...44...-agcttgaattgtatattca	GGTATTAA	GGTGCAACTACTGGT	tag--aaaag-cgcgaggcctcccactgagga-gctgcc-----	tttattta	----gaga
S. Sus	tggtttaa	gagagagaacat...44...-agcttgaattgtatattca	GGTATTAA	GGTGCAACTACTGGT	tagaaaaaag-ctcagggcctcccactgagga-gctgccctttatttaatttactta	tttaaaga	tttaaaga
O. Avi	tggtttaa	gagagagaacat...44...-agcttgaattgtatattca	GGTATTAA	GGTGCAACTACTGGT	taga-a-aag-ctcagggcctcccactgagga-gctgcc-----	tttattta	----gaga
L. Afr	tggtttaa	gagagagaacat...44...-agcttgaattgtatattca	GGTATTAA	GGTGCAACTACTGGT	taga-aaaaa-ctcagggcctcccactgggga-ggtgcc-----	tttattta	taaaaaaa
	* * *	***** *	***** * ** *	*****	* * * * * ** ** * * *	* * *	*

id=632648 gene=ENSG0000182944 name=EWSR1 segment=chr22_29686674_29686818.1 type=AN

H. Sap	gtgccctg	aga-tgtatggct...249...ctatTTTTTcttgcctaattt	GCCAA	GTATTGCAC	TTAATACC	agccccgaaatgaaaggaa...205...ttatccccccag	cagcgctg
R. Mac	gtgccctg	aga-tgtatggct...248...ctatTTTTTcttgcctaattt	GCCAA	GTATTGCAC	TTAATACC	agccccgaaatgaaaggaa...205...ttatccccccag	cagcgctg
P. Tro	gtgccctg	aga-tgtatggct...249...ctatTTTTTcttgcctaattt	GCCAA	GTATTGCAC	TTAATACC	agccccgaaatgaaaggaa...205...ttatccccccag	cagcgctg
P. Abe	gtgccctg	aga-tgtatggct...248...ctatTTTTTcttgcctaattt	GCCAA	GTATTGCAC	TTAATACC	agccccgaaatgaaaggaa...205...ttatccccccag	cagcgctg
C. Jac	gtgccctg	aga-tgtatggct...249...ctatTTTTTcttgcctaattt	GCCAA	GTATTGCAC	TTAATACC	agccccgaaatgaaaggaa...205...ttatccccccag	cagcgctg
M. Mus	gtgccctg	aga-tgtatggct...262...tttcttctcctcctaattt	GCCAA	GTATTGCAC	TTAATACC	agcccctgacatgaaagaaa...205...ttatccccccag	cagcgctg
R. Nor	gtgccctg	aga-tgtatggct...278...tttcttctcctcctaattt	GCCAA	GTATTGCAC	TTAATACC	agcccctgacatgaaagaga...205...ttatccccccag	cagcgctg
C. Por	gtgccctg	aga-tgtatggct...247...gtttcttactccctaattt	GCCAA	GTATTGCAC	TTAATACC	agccccgaaatgaaaggaa...205...ttatccccccag	cagcgctg
O. Cun	gtgccctg	aga-tgtatggct...243...ctgtttttccccctaattt	GCCAA	GTATTGCAC	TTAATACC	agccccgtaatgaaaggaa...202...ttatccccccag	cagcgctg
C. Fam	gtgccctg	aga-tgtatggct...232...acttttttccccctaattt	GCCAA	GTATTGCAC	TTAATACC	agccccgaaatgaaaggaa...205...ttatccccccag	cagcgctg
F. Cat	gtgccctg	aga-tgtatggct...230...ctgttttcttccccctaattt	GCCAA	GTATTGCAC	TTAATACC	agccccgaaatgaaaggaa...205...ttatccccccag	cagcgctg
B. Tau	gtgccctg	aga-tgtatggct...242...atgtattttcccccaattt	GCCAA	GTATTGCAC	TTAATACC	agcccctgaaatgaaaggaa...205...ttatccccccag	cagcgctg
S. Sus	gtgccctg	aga-tgtatggct...243...atgtattttcccccaattt	GCCAA	GTATTGCAC	TTAATACC	agccccgaaatgaaaggaa...204...ttatccccccag	cagcgctg
O. Avi	gtgccctg	aga-tgtatggct...242...atgtattttcccccaattt	GCCAA	GTATTGCAC	TTAATACC	agcccctgaaatgaaaggaa...205...ttatccccccag	cagcgctg
L. Afr	gtgccctg	aga-tgtatggct...248...tattttttctcctaattt	GCCAA	GTATTGCAC	TTAATACC	agcccagaaatgcaaggaa...205...ttatccccccag	cagcgctg
	* **	** *****	**	* *****	*****	* ** * * *	*****

id=632650 gene=ENSG0000182944 name=EWSR1 segment=chr22_29687009_29687550.1 type=AN VIEW

Figure 716:



H. Sap	ccatgac	gtcgcctaccagg...69...cogtttcatcggtgcacaaGCAGCaaGATCAAAAAGtgagccttttctgattgctg...88...tgtctagtgagg	gggtctgt-
R. Mac	ccatgac	gtcgcctaccagg...69...cogtttcatcggtgcacaaGCAGCaaGATCAAAAAGtgagccttttctgattgctg...87...tgtctagtgagg	gggtctgt-
P. Tro	ccatgac	gtcgcctaccagg...69...cogtttcatcggtgcacaaGCAGCaaGATCAAAAAGtgagccttttctgattgctg...89...tgtctagtgagg	gggtctgt-
P. Abe	ccatgac	gtcgcctaccagg...69...cogtttcatcggtgcacaaGCAGCaaGATCAAAAAGtgagccttttctgattgctg...89...tgtctagtgagg	gggtctgt-
C. Jac	ccatgac	gtcgcctaccagg...69...cogtttcatcggtgcacaaGCAGCaaGATCAAAAAGtgagccttttctgattgctg...88...tgtctagtgagg	gggtctgt-
M. Mus	ccatgac	gtcgcgaccagg...69...cogtttcatcggtgcataaGCAGCaaGATCAAAAAGtgagccttttctgattgctg...88...tgtctagtga-g	gggtctgtg
R. Nor	ccatgac	gtcgcgaccagg...69...cogtttcatcggtgcataaGCAGCaaGATCAAAAAGtgagccttttctgattgctg...88...tgtctagtga-g	gggtctgtg
C. Por	ccatgac	gtcgcgaccagg...69...cogtttcatcggtgcacaaGCAGCaaGATCAAAAAGtgagccttttctgattgctg...88...tgtctagtgagg	gggtctgt-
O. Cun	ccatgac	gtcgcgaccagg...69...cogtttcatcggtgcacaaGCAGCaaGATCAAAAAGtgagccttttctgattgctg...87...tgtctagtgagg	gggtctgt-
C. Fam	ccatgac	gtcgcgaccagg...69...cogtttcatcggtgcacaaGCAGCaaGATCAAAAAGtgagccttttctgattgctg...89...tgtctagtgagg	gggtctgt-
B. Tau	ccatgac	gtcgcgaccagg...69...cogtttcatcggtgcacaaGCAGCaaGATCAAAAAGtgagccttttctgattgctg...88...tgtctagtgagg	gggtctgt-
E. Cab	ccatgac	gtcgcgaccagg...69...cogtttcatcggtgcacaaGCAGCaaGATCAAAAAGtgagccttttctgattgctg...88...tgtctagtgagg	gggtctgt-
S. Sus	ccatgac	gtcgcgaccagg...69...cogtttcatcggtgcacaaGCAGCaaGATCAAAAAGtgagccttttctgattgctg...89...tgtctagtgagg	gggtctgt-
L. Afr	ccatgac	gtcgcgaccagg...69...cogtttcatcggtgcacaaGCAGCaaGATCAAAAAGtgagccttttctgattgctg...87...tgtctagtgagg	gggtctgt-
*****	*	** ** ** *	***** * *****

id=814818 gene=ENSG00000136535 name=TBR1 segment=chr2.162272605_162272841.1 type=E5

H. Sap	ccatgac	gtcgcctaccagg...90...cagcaagatcaaaagtgagcCTTTtTGATTGCTGCatagtgatcaattggccaatc...67...tgtctagtgagg	gggtctgt-
R. Mac	ccatgac	gtcgcctaccagg...90...cagcaagatcaaaagtgagcCTTTtTGATTGCTGCatagtgatcaattggccaatc...66...tgtctagtgagg	gggtctgt-
P. Tro	ccatgac	gtcgcctaccagg...90...cagcaagatcaaaagtgagcCTTTtTGATTGCTGCatagtgatcaattggccaatc...68...tgtctagtgagg	gggtctgt-
P. Abe	ccatgac	gtcgcctaccagg...90...cagcaagatcaaaagtgagcCTTTtTGATTGCTGCatagtgatcaattggccaatc...68...tgtctagtgagg	gggtctgt-
C. Jac	ccatgac	gtcgcctaccagg...90...cagcaagatcaaaagtgagcCTTTtTGATTGCTGCatagtgatcaattggccaatc...67...tgtctagtgagg	gggtctgt-
M. Mus	ccatgac	gtcgcgaccagg...90...cagcaagatcaaaagtgagcCTTTtTGATTGCTGCatagtgatcaattggccaatc...67...tgtctagtga-g	gggtctgtg
R. Nor	ccatgac	gtcgcgaccagg...90...cagcaagatcaaaagtgagcCTTTtTGATTGCTGCatagtgatcaattggccaatc...67...tgtctagtga-g	gggtctgtg
C. Por	ccatgac	gtcgcgaccagg...90...cagcgagatcaaaagtgagcCTTTtTGATTGCTGCatagtgatcaattggccaatc...67...tgtctagtgagg	gggtctgt-
O. Cun	ccatgac	gtcgcgaccagg...90...cagcgagatcaaaagtgagcCTTTtTGATTGCTGCatagtgatcaattggccaatc...66...tgtctagtgagg	gggtctgt-
C. Fam	ccatgac	gtcgcgaccagg...90...cagcaagatcaaaagtgagcCTTTtTGATTGCTGCatagtgatcaattggccaatc...68...tgtctagtgagg	gggtctgt-
B. Tau	ccatgac	gctgcgaccagg...90...cagcaagatcaaaagtgagcCTTTtTGATTGCTGCatagtgatcaattggccaatc...67...tgtctagtgagg	gggtctgt-
E. Cab	ccatgac	gtcgcgaccagg...90...cagcaagatcaaaagtgagcCTTTtTGATTGCTGCatagtgatcaattggccaatc...67...tgtctagtgagg	gggtctgt-
S. Sus	ccatgac	gtcgcgaccagg...90...cagcaagatcaaaagtgagcCTTTtTGATTGCTGCatagtgatcaattggccaatc...68...tgtctagtgagg	gggtctgt-
L. Afr	ccatgac	gtcgcgaccagg...90...cagcaagatcaaaagtgagcCTTTtTGATTGCTGCatagtgatcaattggccaatc...66...tgtctagtgagg	gggtctgt-
*****	*	** ** ** *	***** * *****

id=814818 gene=ENSG00000136535 name=TBR1 segment=chr2.162272605_162272841.1 type=E5 VIEW

Figure 717:



H. Sap	caaaacta	gtaagttttcc...98...cgtacatatatattgcttga--	AAAACTTTTAAGGGTGATAGGG	-----aactcgtaatgtaactaggc...	.421...aagttttgcatt	ggacagat
R. Mac	caaaacta	gtaagttttcc...98...cgtacatatatattgcttga--	AAAACTTTTAAGGGTGATAGGG	-----aactcgtaatgtaactagac...	.426...aagttttgcatt	ggacagat
P. Tro	caaaacta	gtaagttttcc...98...cgtacatatatattgcttga--	AAAACTTTTAAGGGTGATAGGG	-----aactcgtaatgtaactaggc...	.421...aagttttgcatt	ggacagat
P. Abe	caaaacta	gtaagttttcc...98...cgtacatatatattgcttga--	AAAACTTTTAAGGGTGATAGGG	-----aactcgtaatgtaactaggc...	.421...aagttttgcatt	ggacagat
C. Jac	caaaacta	gtaagttttcc...98...cgtacatatatattgcttga--	AAAACTTTTAAGGGTGATAGGG	-----aactcgtaatgtaactagac...	.425...aagttttgcatt	ggacagat
M. Mus	caaaacta	gtaagttttcc...101...--taca-atatattgcttgaac-	AACCTTTTAAGGGTGATAGGG	-----aactcataatgtgactagac...	.430...aagttttgcatt	ggacagat
R. Nor	caaaacta	gtaagttttcc...100...--taca-atatattgcttgaac-	AACCTTTTAAGGGTGATAGGG	-----aactcataatgtgactagac...	.432...aagttttgcatt	ggacagat
C. Por	caaaacta	gtaagttttcc...98...cgtacatatatattgcttga--	AAAACTTTTAAGGGTGATAGGG	acTGGTAAcgatcctcaagtgaactta---	.401...aagttttgcatt	ggacagat
O. Cun	caaaacta	gtaagttttcc...99...-gtacatatatattgcttga-	AAAACTTTTAAGGGTGATAGGG	-----aactcataatgtaaccagac...	.437...aagttttgcatt	ggacagat
C. Fam	caaaacta	gtaagttttcc...99...-gtacatatatattgcttga-	TAAAACTTTTAAGGGTGATAGGG	-----aactcataatgtaactagac...	.424...aagttttgcatt	ggacagat
F. Cat	caaaacta	gtaagttttcc...99...-gtacatatatattgcttga-	TAAAACTTTTAAGGGTGATAGGG	-----aactcataatgtaactagac...	.425...aagttttgcatt	ggacagat
B. Tau	aaaaacta	gtaagttttcc...99...-gtacatatatattgcttga-	TAAAACTTTTAAGGGTGATAGGG	-----aactcataatgtaactagac...	.426...aagttttgcatt	ggacagat
E. Cab	caaaacta	gtaagttttcc...99...-gtacatatatattgcttga-	TAAAACTTTTAAGGGTGATAGGG	-----aactcataatgtaactagac...	.427...gagttttgcatt	ggacagat
S. Sus	aaaaacta	gtaagttttcc...99...-gtacatatatattgcttga-	TAAAACTTTTAAGGGTGATAGGG	-----aactcataatgtaactagac...	.425...aagttttgcatt	ggacagat
L. Afr	caaaacta	gtaagttttcc...99...-gtacatatatattgcttga-	TAAAACTTTTAAGGGTGATAGGG	-----actcataatgtaactagacc...	.427...aagttttgcatt	ggacagat
	*****	*****	*** *****	*****	** * ** *	*****

id=589856 gene=ENSG00000112081 name=SRSF3 segment=chr6_36568054_36568658_1 type=AN

H. Sap	caaaacta	gtaagttttcc...232...-----tctggc-aaaatttgttgaa	TCC-TATCACCTTTAAAtGGTTTT	actaacag-tttcaaat...	.286...aagttttgcatt	ggacagat
R. Mac	caaaacta	gtaagttttcc...237...-----tctggc-aaaatttgttgaa	TCC-TATCACCTTTAAAtGGTTTT	actaacag-tttcaaat...	.286...aagttttgcatt	ggacagat
P. Tro	caaaacta	gtaagttttcc...232...-----tctggc-aaaatttgttgaa	TCC-TATCACCTTTAAAtGGTTTT	actaacag-tttcaaat...	.286...aagttttgcatt	ggacagat
P. Abe	caaaacta	gtaagttttcc...232...-----tctggc-aaaatttgttgaa	TCC-TATCACCTTTAAAtGGTTTT	actaacag-tttcaaat...	.286...aagttttgcatt	ggacagat
C. Jac	caaaacta	gtaagttttcc...237...-----ctggcaaaaatttgttgaa	TCC-TATCACCTTTAAAtGGTTTT	actaacag-tttcaaat...	.285...aagttttgcatt	ggacagat
M. Mus	caaaacta	gtaagttttcc...237...-----cctagc-aaaatttgttgaa	TCC-TATCACCTTTAAAtGGTTT	actaacagttttcaaat---	.293...aagttttgcatt	ggacagat
R. Nor	caaaacta	gtaagttttcc...235...-----cctagc-aaaatttgttgaa	TCC-TATCACCTTTAAAtGGTTT	actaacagttttcaagt---	.296...aagttttgcatt	ggacagat
C. Por	caaaacta	gtaagttttcc...224...cttttctccttagc-aaaatt	TGGTTGaaTCC-TATCACCTTTAAAtGGTTTT	actaacgttttcaaat---	.275...aagttttgcatt	ggacagat
O. Cun	caaaacta	gtaagttttcc...247...-----aaaacaaaaaattgtcgaa	TCC-TATCACCTTTAAAtGGTTTT	actaacgttttcaaat---	.288...aagttttgcatt	ggacagat
C. Fam	caaaacta	gtaagttttcc...239...-----tctagc-aaaatttgttgaa	TCC-TATCACCTTTAAAtGGTTTT	actaacgttttcaaat...	.283...aagttttgcatt	ggacagat
F. Cat	caaaacta	gtaagttttcc...240...-----tctagc-aaaatttgttgaa	TCC-TATCACCTTTAAAtGGTTTT	actaacgttttcaaat...	.283...aagttttgcatt	ggacagat
B. Tau	aaaaacta	gtaagttttcc...239...-----tctagc-aaaatttgttgaa	TCC-TATCACCTTTAAAtGGTTTT	actaacgttttcaaat...	.285...aagttttgcatt	ggacagat
E. Cab	caaaacta	gtaagttttcc...239...-----tctagc-aaaatttgttgaa	TCC-TATCACCTTTAAAtGGTTTT	actaacgttttcaaat...	.286...gagttttgcatt	ggacagat
S. Sus	aaaaacta	gtaagttttcc...238...-----tctagc-aaaatttgttgaa	TCC-TATCACCTTTAAAtGGTTTT	actaacgttttcaaat...	.285...aagttttgcatt	ggacagat
L. Afr	caaaacta	gtaagttttcc...240...-----ctagcaaaaatttgttgaa	TCCTTATCACCTTTAAAtGGTTTT	actaacgttttcaaat...	.285...aagttttgcatt	ggacagat
	*****	*****	* *** ** *	*****	*****	*****

id=589856 gene=ENSG00000112081 name=SRSF3 segment=chr6_36568054_36568658_1 type=AN VIEW

Figure 718:



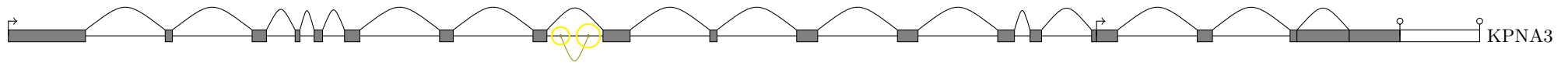
H. Sap	cgctgcag	gtactt-gagaga...	359...	-----attgtaatat	tatc-aaaca-	GGCAGCTGTTT	AATGT	tacaactggtaaagtagaaa	----	397...	acccgttacag	agtcacca
R. Mac	cgctgcag	gtactt-gagaga...	361...	-----attgtaatat	tatc-aaaca-	GGCAGCTGTTT	AATGT	tacaactggtaaagtagaaa	----	397...	acccgttacag	agtcacca
P. Tro	cgctgcag	gtactt-gagaga...	360...	-----attgtaatat	tatc-aaaca-	GGCAGCTGTTT	AATGT	tacaactggtaaagtagaaa	----	398...	acccgttacag	agtcacca
P. Abe	cgctgcag	gtactt-gagaga...	456...	-----ggctaaaaa	agaagt--aatcc	CAGTcATCTGTTc	-----	ttcaatc--ccaaataggag	--aa...	305...	acccgttacag	agtcacca
C. Jac	cgctgcag	gtactt-gagaga...	359...	-----attgtaatat	tatc-aaaca-	GGCAGCTGTTT	AATGT	tgcaactggtaaagtagaag	----	388...	acccgttacag	agtcacca
M. Mus	cggcgag	gtactt-gagaga...	356...	-----ttgtaatat	tatc-aaaca-	GGCAGCTGTTT	AATGT	tacaactggtaaagtagaag	----	392...	acccgttacag	agtcacca
R. Nor	cggcgag	gtactt-gagaga...	356...	-----ttgtagtag	ttgtctcaaaa-	GGCAGCTGTTT	AATGT	tacaactggtaaagtagaaa	----	391...	acccgttacag	agtcacca
C. Por	cggcgag	gtactt-gagaga...	336...	-----agttgtaatat	gtatc--aac-	TGGCAGCTGTTT	AATGT	tacaactggtaaagtagaaa	----	399...	acccgttacag	agtcacca
O. Cun	cggcgag	gtactt-gagaga...	360...	-----attgtaatat	tatc-aaaa-	GGCAGCTGTTT	AATGT	tgcaactggtaaaatggaaa	----	395...	acccgttacag	agtcacca
C. Fam	cggcgag	gtactt-gagagc...	350...	-----attgtagtat	tatc-aagca-	GGCAGCTGTTT	TAATGT	tacaactggtaaagtagaaa	----	399...	acccgttacag	agtcacca
F. Cat	cgctgcag	gtactt-gagagc...	354...	-----attgtagtat	tatc-aaaca-	GGCAGCTGTTT	TAATGT	IAAAactggtaaagtagaatcat	...	388...	acccgttacag	agtcacca
B. Tau	cgacgcag	gtacttagagag-	432...	aaaggggggcta	-----aagt--	aatccCAGTcATCTGTTc	-----	ttcaaac--ccaaataggag	--ag...	307...	acccgttacag	agtcacca
E. Cab	cgacgcag	gtactt-gagaga...	364...	-----attgtaatat	tatc-aaaca-	GGCAGCTGTTT	AATGT	tactgctggtaaagtagaaa	----	395...	acccgttacag	agtcacca
S. Sus	cggcgag	gtacttagagag-	346...	-----attgtaatat	tatc-aaaca-	GGCAGCTGTTT	AATGT	tgcaactggtaaagtagaag	----	395...	acccgttacag	agtcacca
L. Afr	cgctgcag	gtactt-gagaga...	361...	-----attgtaatat	tatc-aaaca-	GGCAGCTGTTT	AATGT	tacaactggtaaagtagaaa	----	414...	acccgttacag	agtcacca
	** *****	*** ** *	**	*	*	** *****	*	** * *		*****	*****	

id=589854 gene=ENSG00000112081 name=SRSF3 segment=chr6.36566761.36567597.1 type=IN

H. Sap	tttGCATT	GGACAGatCTGCT	gtgaagcattctttgttaa-	...225...	ttctgcttttag	atctccaa
R. Mac	tttGCATT	GGACAGatCTGCT	gtgaagcattctttgttaa-	...202...	ttctgcttttag	atctccac
P. Tro	tttGCATT	GGACAGatCTGCT	gtgaagcattctttgttaa-	...217...	ttctgcttttag	atctccaa
P. Abe	tttgcatt	GGACAGATctGCT	gtgaagcattctttgttaa-	...216...	ttctgcttttag	atctccaa
C. Jac	tttGCATT	GGACAGatCTGCT	gtgaagcattctttgttaa-	...217...	ttctgcttttag	atctccaa
M. Mus	tttGCATT	GGACAGatCTGCT	gtgaagcattctttgttaa-	...205...	ttctgcttctag	atccccaa
R. Nor	tttGCATT	GGACAGatCTGCT	gtgaagcattctttgttaa-	...215...	ttctgcttttag	atccccaa
C. Por	tttGCATT	GGACAGatCTGCT	gtgaagcattctttgttaa-	...204...	ttctgcttttag	atctccac
O. Cun	tttGCATT	GGACAGatCTGCT	gtgaagcattctttgttaa-	...203...	ttctgcttttag	atctccaa
C. Fam	tttGCATT	GGACAGatCTGCT	gtgaagcattctttgttaa-	...243...	ttctgcttttag	atctccaa
F. Cat	ttTGCATT	GGACAGatCTGCT	gtgaagcattctttgttaa-	...270...	ttctgcttttag	atctccaa
B. Tau	tttgcatt	GGACAGATctGCT	gtgaagcattctttgttaa-	...217...	ttctgcttttag	atctccaa
E. Cab	tttGCATT	GGACAGatCTGCT	gtgaagcattctttgttaa-	...209...	ttctgcttttag	atctccaa
S. Sus	tttGCATT	GGACAGatCTGCT	gtgaagcattctttgttaa-	...217...	ttctgcttttag	atctccaa
L. Afr	tttGCATT	GGACAGatCTGCT	gtgaagcattctttgttaa-	...232...	ttctgcttttag	atctccaa
	*****	*****			*****	*** **

id=589857 gene=ENSG00000112081 name=SRSF3 segment=chr6.36568659.36568928.1 type=IN VIEW

Figure 719:



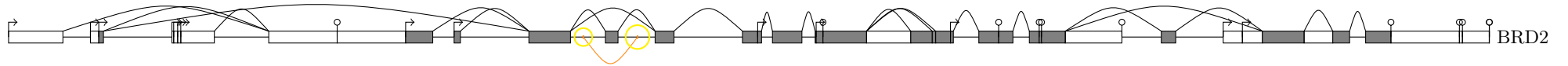
H. Sap	cattatag	gtaagtggttg...41...attggcatagccattacata	CTATGTTTCCTC	---tgaatttaatgtgtgttgac-----	...235...tcatttctgtag	gtgatggt
R. Mac	cattatag	gtaagtggttg...41...attggcatagccattacata	CTATGTTTCCTC	---tgaatttaatgtgggttgac-----	...235...tcatttctgtag	gtgatggt
P. Tro	cattatag	gtaagtggttg...41...attggcatagccattacata	CTATGTTTCCTC	---tgaatttaatgtgtgttgac-----	...235...tcatttctgtag	gtgatggt
C. Jac	cattatag	gtaagtggcaat...49...actggcatagccattacata	CTATGTTTCCTC	---tgaatttaatgtgggttgat-----	...234...tcatttctgtag	gtgatggt
M. Mus	cattatag	gtaagttgaatt...44...attggcatagccattacaca	CTATGTTTCCTC	---tgcattttatagagttgac-----	...225...tcatttctgtag	gtgatggt
R. Nor	cattatag	gtaagttgaatt...48...attggcatagccattacaca	CTATGTTTCCTC	---tgaacttcatgtgagttgac-----	...225...tcatttctgtag	gtgatggt
C. Por	cattatag	gtaagttgctgt...48...attggcatagccattgcata	CTATGTTTCCTC	---tgaatttaatgcaggttgag-----	...235...tcatttctgtag	gtgatggt
O. Cun	catcatag	gtaagtccattc...48...attggcatagccattacaca	CTATGTTTCCTC	---tgaacttaatgtgagctgat-----	...228...tcatttctgtag	gtgatggt
C. Fam	cattatag	gtaagttggatt...49...attggcatagccattacatc	CTATGTTTCCTC	taataaaaatta--gagggtcca-----	...262...tcatttctgtag	gtgatggt
B. Tau	cattatag	gtaagttgaaat...44...cctacattggccattacata	CTATGTTTCCTC	ta ATTGT ---aatgtgggttgactatcttc...	...232...tcatttctgtag	gtgatggt
E. Cab	cattatag	gtaagttgcatt...49...attggcatagccattacata	CTATGTTTCCTC	---taattttaaatacagttgac-----	...239...tcatttctgtag	gtgatggt
S. Sus	tattatag	gtaagttgcatt...49...attggcatagccattacaca	CTATGTTTCCTC	---taattttaaactgtgggttgac-----	...240...tcatttctgtag	gtgatggt
L. Afr	cattatag	gtaagttttatt...50...gttggcatagacattataca	CTATGTTTCCTC	---taaatttgtgtgagttgac-----	...240...tcatttctgtag	gtgatggt
	** ****	*****		* * * * *		*****

id=325369 gene=ENSG00000102753 name=KPNA3 segment=chr13.50296261.50296612.-1 type=IN

H. Sap	cattatag	gtaagtggttg...215...-----tgatgcctttgactaatggt	GAGGAAACATAG	--aacgtcagtggtcccacatg...61...tcatttctgtag	gtgatggt
R. Mac	cattatag	gtaagtggttg...215...-----tgatgcctttgactaatggt	GAGGAAACATAG	--aacgtcagtggtcccacatg...61...tcatttctgtag	gtgatggt
P. Tro	cattatag	gtaagtggttg...215...-----tgatgcctttgactaatggt	GAGGAAACATAG	--aacgtcagtggtcccacatg...61...tcatttctgtag	gtgatggt
C. Jac	cattatag	gtaagtggcaat...223...-----tgatgcctttgactaatggt	GAGGAAACATAG	--aacgtcaatgtcccacatg...60...tcatttctgtag	gtgatggt
M. Mus	cattatag	gtaagttgaatt...208...acgcttgatggt--tgcttgggt--	GAGGAAACATAG	--ggcatcagtggtcccacatg...61...tcatttctgtag	gtgatggt
R. Nor	cattatag	gtaagttgaatt...211...acacttgatgct--tgactgggt--	GAGGAAACATAG	--ggcatcagtggtcccacatg...62...tcatttctgtag	gtgatggt
C. Por	cattatag	gtaagttgctgt...221...-----ggatgctttgagtagtggt	GAGGAAACATAG	--agcatcagtggtcccacatg...62...tcatttctgtag	gtgatggt
O. Cun	catcatag	gtaagtccattc...214...-----acaacactttgactaatggt	GAGGAAACATAG	agaacatcaatgtcccaca--...62...tcatttctgtag	gtgatggt
C. Fam	cattatag	gtaagttggatt...250...-----tgatgcctttgactaatggt	GAGGAAACATAG	--aacatcagtggtcccacatg...61...tcatttctgtag	gtgatggt
B. Tau	cattatag	gtaagttgaaat...217...acagttgatgcccttgactg	ATGGTGAGGAAACATAG	--aacatcagtggtcccacatg...61...tcatttctgtag	gtgatggt
E. Cab	cattatag	gtaagttgcatt...227...-----tgatgctttgactaatggt	GAGGAAACATAG	--aacatcagtggtcccacatg...61...tcatttctgtag	gtgatggt
S. Sus	tattatag	gtaagttgcatt...227...-----tgatgcctttgactaatggt	GAGGAAACATAG	--aacatcagtggtcccacatg...62...tcatttctgtag	gtgatggt
L. Afr	cattatag	gtaagttttatt...229...-----tgatgcctttgactaatggt	GAGGAAACATAG	--aacatcagtggtcccacatg...61...tcatttctgtag	gtgatggt
	** ****	*****		* * * * *	*****

id=325369 gene=ENSG00000102753 name=KPNA3 segment=chr13.50296261.50296612.-1 type=IN VIEW

Figure 720: CS=7.8



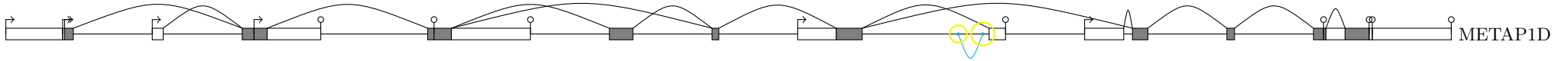
H. Sap	gtctaccg	gtgagtagagac...48...--gtggtctgcctagtgtagat---	GCTGCGGC	CCCTAGg	GAGTT	cccatttctcccctgtaggg...123...tccattttacag	attcccc
R. Mac	gtctaccg	gtgagtagagac...48...--gtggtctgcctagtgtagat---	GCTGCGGCCCTAGg	GAGTT	cccatttctcccctgtaggg...122...tccattttacag	attcccc	
P. Tro	gtctaccg	gtgagtagagac...48...--gtggtctgcctagtgtagat---	GGCTGCGGCCCTAGg	GAGTT	cccatttctcccctgtaggg...123...tccattttacag	attcccc	
P. Abe	gtctaccg	gtgagtagagac...48...--gtggtctgcctagtgtagat---	GCTGCGGCCCTAGg	GAGTT	cccatttctcccctgtaggg...124...tccattttacag	attcccc	
C. Jac	gtctaccg	gtgagtagacac...47...--gtggtctgcctagtgtagat---	GCTGCGGCCCTAGg	GAGTT	cccatttctcccctgtaggg...122...tccattttacag	attcccc	
M. Mus	gtttgccg	gtgagtaagagg...32...gggtgggtgacctaagcatag---	GTGCTGCGGC	CCCTAGg	GAGTT	cccatttctcttagagcaaat...100...tccattttacag	attcccc
R. Nor	gtctgccg	gtgagtaagagt...46...gggtgggtacgtagtatag---	GTGCTGCGGC	CCCTAGGGAGT	ccccgttctctttgagcaaa...98...tccattttacag	attcccc	
C. Por	gtctgccg	gtgagtagagac...51...--ggtgggtcctagtgtaggt---	GCTGCGGCCCTAGg	GACT	tccttttcccctgtaggg...104...tccattttacag	attcccc	
C. Fam	gtctgccg	gtgagtagggat...49...--gtgggctgcttagtataggt---	GCTGCGGC	CCCTAGg	GAGTT	cccatctctctcctgtaggg...121...tccattttacag	attcccc
B. Tau	gtttgccg	gtgagtaggag...52...--g---ctgcctagtgtagtaggt	GCTGCGGC	CCCTAGGGAGT	cccatttctaccctgtaggg...115...tccattttacag	attcccc	
E. Cab	gtctgccg	gtgagtagagag...49...--gtgggctgtctggtataggt---	GCTGCGGC	CCCTAGg	GAGTT	cccgctctctcccctgtaggg...116...tccattttacag	attcccc
S. Sus	gtctgccg	gtgagtagagag...49...--gtgggctgcttagtataggt---	GCTGCGGC	CCCTAGGAA	attccgtctctaccctgtag--...115...tccattttacag	attcccc	
O. Avi	gtctgccg	gtgagtagagag...51...--g---ctgcctagtgtagtaggt	GCTGCGGC	CCCTAGGGAGT	cccatttctaccctataggg...111...tccattttacag	attcccc	
L. Afr	gtctgccg	gtgagtagacat...45...--gtaagctgtttagtgtagt---	GCTGCGGCCCTAGg	GAGTT	tctgtctctccacataggg...114...tccattttacag	attcccc	
	** * **	*****	*	* * **	***** * * *	*****	*****

id=162155 gene=ENSG00000204256 name=BRD2 segment=chr6_32942543_32942797_1 type=IN

H. Sap	ccccagag	gtaatgtcacag...89...--atttattttttgtcccac---	AGTTTaa	TTGGGGCCG	CAGT	ttaagtaactgttctt--tga-...98...tttttatttag	gattatca
R. Mac	ccccagag	gtaatgtcacag...78...--atttattttttgtcccac---	AGTTTaa	CTGGGGCCG	CAGT	ttaagtaaatattcctt--tga-...91...ttctctatttag	gattatca
P. Tro	ccccagag	gtaatgtcacag...89...--atttacttattttgtcacac---	AGTTTaa	CTGGGGCCG	CAGT	taagtaattattcctt--tga-...85...ttctttatttag	gattatca
P. Abe	ccccggag	gtaatgtcacag...90...--atttacttattttgtcccac---	AGTTTaa	CTGGGGCCG	CAGT	ttaagtaactattcctt--tga-...88...ttctttatttag	gattatca
C. Jac	ccccagag	gtaatgtcacag...93...--ttttttttcttttgtcccac---	AGTTTaa	CTGGGGCCG	CAGT	ttagataactgtt-ctt--tga-...83...ttcttttttag	gattatca
M. Mus	ccccagag	gtaatgtcacag...73...aaattacctttttctagact---	AGTTTaa	TTGGGGCCG	CAGTGT	gggcaatattccttaatagc...103...tttttttttag	gattatca
R. Nor	ccccagag	gtaatgtcacag...78...--tctaattttttctagccata---	GTTTaa	TTGGGGCCG	CAGTGT	gggcaatactccttaatggc...84...atctttcttag	gattatca
C. Por	tcccagag	gtaatgtcacag...89...--ttttttttcttttgtcctgt---	AGTTTaa	TGGGGCCG	CAGT	caagggaactatgtagtcc--...107...atctttatttag	gattatca
C. Fam	ccccagag	gtaatgtttcag...87...--tccattttttctctgtcctt---	AGTTTaa	TTGGGGCCG	CAGT	ttaggggaatacatattttg--...88...ttctttctctag	gattatca
B. Tau	ccccagag	gtaatgtcacag...89...--attttttatccctatcccat---	AGTTTaa	TTGGGGCCG	CAGT	t--gagactatgtactcccctg...92...tttttcttttag	gattatca
E. Cab	ccccagag	gtaatgtcacag...85...--tccgtttttatctgtcctgt---	AGTTTaa	TTGGGGCCG	CAGT	taaggggactatatactcct--...100...ttctttcttttag	gattatca
S. Sus	ccccagag	gtaatgtcacag...98...-----tttttttctgtcccttagtt	TTTTaa	TTGGGGCCG	CAGT	ttaggaaactatttctt--tga-...126...tttttttttag	gattatca
O. Avi	ccccagag	gtaatgtcacag...89...--attttttaaccctatcccat---	AGTTTga	TTGGGGCCG	CAGT	ttagggagactatgtactcct--...94...ctttttcttttag	gattatca
L. Afr	ccccagag	gtaatgtcacag...74...--atttactcaggctgtcctgt---	AGTTTcag	TGGGGCCG	CAGT	ttagggagactttgtaccct--...105...tttttttttag	gattatca
	** * **	***** **	*	*	** ***** *	* * *	* * * ** *****

id=162157 gene=ENSG00000204256 name=BRD2 segment=chr6_32942890_32943160_1 type=IN VIEW

Figure 721: CS=10.92



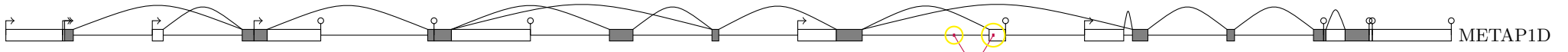
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R. Mac	acaatcag	gtaagccttaca...1041...tctctctgttctttcatagg	AAATGTTGAATC	agaccctactgggaaaaga...165...tttattcttcag	tagaaggg
P. Tro	acaatcag	gtaagccttaca...1039...tctctctgttctttcatagg	AAATGTTGAATC	agaccctactgggaaaaga...165...tttattcttcag	tagaaggg
C. Jac	acaatcag	gtaagccttaca...1023...tctctctgttctttcatagg	AAATGTTGAATC	agaccctactgggaaaaga...165...tttattcttcag	tggaaggg
M. Mus	acaatcag	gtaagccttgta...1007...tctctctgttctttcatagg	AAATGTTGAATC	agaccctactgggaaaaga...165...tttattcttcag	tcgaaggg
R. Nor	acaatcag	gtaagccttgca...1002...tctctcctgtctttcacagg	AAATGTTGAATC	agaccctactgggaaaaga...165...tttattcttcag	tcgaaggg
C. Por	acaatcag	gtaagctccaca...1011...tctctctgttctttcatagg	AAATGTTGAATC	agaccctactgggaaaaga...165...tttattcttcag	tagaaggg
O. Cun	acaatcag	gtaagccttgca...1027...tctctctgttctttcatagg	AAATGTTGAATC	agaccctactgggaaaaga...165...tttattcttcag	tggaaggg
C. Fam	acaatcag	gtaagcctgaca...1042...tctctctgttctttcatagg	AAATGTTGAATC	agaccctactgggaaaaga...165...tttattcttcag	tcgaaggg
B. Tau	acaatcag	gtaagccttaca...1024...tctctctgttctttcatagg	AAATGTTGAATC	agaccctactgggaaaaga...165...tttattcttcag	tagaaggg
S. Sus	acaatcag	gtaagccttgca...1010...tctctctgttctttcatagg	AAATGTTGAATC	agaccctactgggaaaaga...165...tttattcttcag	tcgaaggg
O. Avi	acaatcag	gtaagccttaca...1464...tctctctgttctttcatagg	AAATGTTGAATC	agaccctactgggaaaaga...165...tttattcttcag	tagaaggg
L. Afr	acaatcag	gtaagccttaca...1026...tctctctgttctttcatagg	AAATGTTGAATC	agaccctactgggaaaaga...165...tttattcttcag	tcgaaggg
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id=731229 gene=ENSG00000172878 name=METAP1D segment=chr2.172935799_172937078.1 type=IN

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R. Mac	acaatcag	gtaagccttaca...1195...tcatatTTTTgaacacctag	GGTTCAACaaATTT	actggtggtgctcttgcattttaacaaaatttattcttcag	tagaaggg
P. Tro	acaatcag	gtaagccttaca...1193...tcatatTTTTgaacacctag	GGTTCAACaaATTT	actggtggtgctcttgcattttaacaaaatttattcttcag	tagaaggg
C. Jac	acaatcag	gtaagccttaca...1177...tcatatTTTTgaacacctag	GGTTCAACaaATTT	actggtggtgctcttgcattttaacaaaatttattcttcag	tggaaggg
M. Mus	acaatcag	gtaagccttgta...1161...tcatatTTTTgaacacctag	GGTTCAACaaATTT	actggtggtgctcttgcattttaacaaaatttattcttcag	tcgaaggg
R. Nor	acaatcag	gtaagccttgca...1156...tcatatTTTTgaacacctag	GGTTCAACaaATTT	actggtggtgctcttgcattttaacaaaatttattcttcag	tcgaaggg
C. Por	acaatcag	gtaagctccaca...1165...tcatatTTTTgaacacctag	GGTTCAACaaATTT	actggtggtgctcttgcattttaacaaaatttattcttcag	tagaaggg
O. Cun	acaatcag	gtaagccttgca...1181...tcgtatTTTTgaacacctag	GGTTCAACaaATTT	actggtggtgctcttgcattttaacaaaatttattcttcag	tggaaggg
C. Fam	acaatcag	gtaagcctgaca...1196...tcatatTTTTgaacacctag	GGTTCAACaaATTT	actggtggtgctcttgcattttaacaaaatttattcttcag	tcgaaggg
B. Tau	acaatcag	gtaagccttaca...1178...tcatatTTTTgaacacctag	GGTTCAACaaATTT	actggtggtgctcttgcattttaacaaaatttattcttcag	tagaaggg
S. Sus	acaatcag	gtaagccttgca...1164...tcatatTTTTgaacacctag	GGTTCAACaaATTT	actggtggtgctcttgcattttaacaaaatttattcttcag	tcgaaggg
O. Avi	acaatcag	gtaagccttaca...1618...tcatatTTTTgaacacctag	GGTTCAACaaATTT	actggtggtgctcttgcattttaacaaaatttattcttcag	tagaaggg
L. Afr	acaatcag	gtaagccttaca...1180...tcatatTTTTgaacacctag	GGTTCAACaaATTT	actggtggtgctcttgcattttaacaaaatttattcttcag	tcgaaggg
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id=731229 gene=ENSG00000172878 name=METAP1D segment=chr2.172935799_172937078.1 type=IN VIEW

Figure 722:



METAP1D

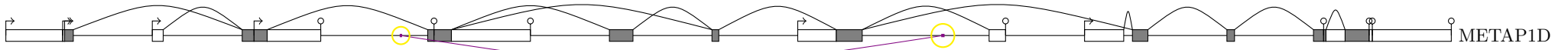
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R. Mac	acaatcag	gtaagccttaca...1011...	---ggctaactagcctgggaaaa	AAGGATAGTGTc	TCTCTGTTCTTTC	ataggaaatggtgaatcaga	-----	...182...	tttattcttcag	tagaaggg
P. Tro	acaatcag	gtaagccttaca...1009...	---ggctaactagcctgggaaaa	AAGGATAGTGTc	TCTCTGTTCTTTC	ataggaaatggtgaatcaga	-----	...182...	tttattcttcag	tagaaggg
P. Abe	acaatcag	gtaagccttaca...1008...	---ggctaactagcctgggaaaa	AAGGATAGTGTc	TCTCTGTTCTTTC	ataggaaatggtgaatcaga	-----	...182...	tttattcttcag	tagaaggg
C. Jac	acaatcag	gtaagccttaca...1018...	tagtgtctctgttcttctt	ATAGgaAATGTTGAAT	-----	-----	-----	...166...	tttattcttcag	tggaaggg
M. Mus	acaatcag	gtaagccttgta...977...	---ggctaactagcctgggaaaa	AAGGATAGTGTc	TCTCTGTTCTTTC	ataggaaatggtgaatcaga	-----	...182...	tttattcttcag	tcgaaggg
R. Nor	acaatcag	gtaagccttgca...923...	---ttattgaagactttgaacaa	AATGTGTTTTG	-----	acagttttaaattataggct	-----	...243...	tttattcttcag	tcgaaggg
C. Por	acaatcag	gtaagcctcaca...981...	---ggctaactagcctgggaaaa	AAGGATAGTGTc	TCTCTGTTCTTTC	ataggaaatggtgaatcaga	-----	...182...	tttattcttcag	tagaaggg
O. Cun	acaatcag	gtaagccttgca...997...	---ggctaactagcctgggaaaa	AAGGATAGTGTc	TCTCTGTTCTTTC	ataggaaatggtgaatcaga	-----	...175...	tttattcttcag	tggaaggg
C. Fam	acaatcag	gtaagcctgaca...1012...	---ggctaactagcctgggaaaa	AAGGATAGTGTc	TCTCTGTTCTTTC	ataggaaatggtgaatcaga	-----	...182...	tttattcttcag	tcgaaggg
B. Tau	acaatcag	gtaagccttaca...994...	---ggctaactagcctgggaaaa	AAGGATAGTGTc	TCTCTGTTCTTTC	ataggaaatggtgaatcaga	-----	...182...	tttattcttcag	tagaaggg
E. Cab	acgatcag	gtaagccttaca...988...	---ggctaactagcctgggaaaa	AAGGATAGTGTc	TCTCTGTTCTTTC	ataggaaatggtgaatcaga	-----	...182...	tttattcttcag	tagaaggg
S. Sus	acaatcag	gtaagccttgca...980...	---ggctaactagcctgggaaaa	AAGGATAGTGTc	TCTCTGTTCTTTC	ataggaaatggtgaatcaga	-----	...182...	tttattcttcag	tcgaaggg
O. Avi	acaatcag	gtaagccttaca...1434...	---ggctaactagcctgggaaaa	AAGGATAGTGTc	TCTCTGTTCTTTC	ataggaaatggtgaatcaga	-----	...182...	tttattcttcag	tagaaggg
L. Afr	acaatcag	gtaagccttaca...996...	---ggctaactagcctgggaaaa	AAGGATAGTGTc	TCTCTGTTCTTTC	ataggaaatggtgaatcaga	-----	...182...	tttattcttcag	tcgaaggg
	** *****	***** *	* *	***		* *		*** *****	* *****	

id=731229 gene=ENSG00000172878 name=METAP1D segment=chr2_172935799_172937078.1 type=IN

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R. Mac	ttcttcag	ta-----	GAAGgGGGCAGAGAACACT	ag-ATTCT-T	---attcaagcattctatcgagc...43...	tctctctgagag	gtaattat	
P. Tro	ttcttcag	ta-----	GAAGgGGGCAGAGAACACT	ag-ATTCT-T	---attcaagcattctatcgagc...43...	tctctctgagag	gtaattat	
P. Abe	ttcttcag	ta-----	GAAGgGGGCAGAGAACACT	ag-ATTCT-T	---attcaagcattctatcgagc...43...	tctctctgagag	gtaattat	
C. Jac	ttcttcag	tggaagggggcagagaacact	tagattcttATTCAAgCATTCTAT	cgagctc-tgcatc-atggct...	28...	tctctctgagag	gtaattat	
M. Mus	ttcttcag	tc-----	GAAGgGGGCAGAGAACACT	gg-ATTCT-T	---attcaggcattctgtggagt...43...	tctctctgagag	gtaattat	
R. Nor	ttcttcag	tcgaaggggg	-----	CAGAgAACCTag-ATT	---cttattcaggcattctgtgg---	46...	tctctctgagag	gtaattat
C. Por	ttcttcag	ta-----	GAAGgGGGCAGAGAACACT	ag-ATTCT-T	---attcaagcattctatcgagc...43...	tctctctgagag	gtaattat	
O. Cun	t-----		TCTTcaGTGGAaggGGGCAGAGAACACT	gg-ATTCT-T	---attcaagcattctatcgagc...43...	tctctctgagag	gtaattat	
C. Fam	ttcttcag	tc-----	GAAGgGGGCAGAGAACACT	ag-ATTCT-T	---attcaagcattctatcgagc...43...	tctctctgagag	gtaattat	
B. Tau	ttcttcag	ta-----	GAAGgGGGCAGAGAACACT	ag-ATTCT-T	---attcaagcattctatcgagc...43...	tctctctgagag	gtaattat	
E. Cab	ttcttcag	ta-----	GAAGgGGGCAGAGAACACT	gg-ATTCT-T	---attcaagcattctatcgagc...43...	tctctctgagag	gtaattat	
S. Sus	ttcttcag	tc-----	GAAGgGGGCAGAGAACACT	ag-ATTCT-T	---attcaagcattctatcgagc...43...	tctctctgagag	gtaattat	
O. Avi	ttcttcag	ta-----	GAAGgGGGCAGAGAACACT	ag-ATTCT-T	---attcaagcattctatcgagc...43...	tctctctgagag	gtaattat	
L. Afr	ttcttcag	tc-----	GAAGgGGGCAGAGAACACT	ag-ATTCT-T	---attcaagcattctatcgagc...43...	tctctctgagag	gtaattat	
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Figure 723:



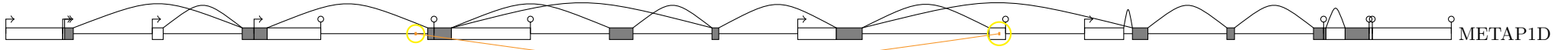
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C. Jac	aaaattgt	gatgattcaaaa...1496...gaggcagcactaacaggcaa	TGTTAAGTTCAAAAGGGC	aggggaaggaactgggggca...135...ttttcctcaag	cacataaa
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R. Nor	aaaattgg	gttgatttaaga...2183...agagcagcaccaccaggcca	TGTTAAGTTCAAAAGGGC	aggggaaggaaccgggggta...136...cctttcctcaag	cacataaa
C. Por	taaatcgg	gattattcaagg...1578...gaggcagcactaacaggcaa	TGTTAAGTTCAAAAGGGC	aggggaaggaactgggggca...135...ttttcctcaag	catataaa
O. Cun	tcaactgg	ggtgattctaga...1536...gaggcagcgtaaacaggcca	TGTTAAGTTCAAAAGGGC	aggggaaggaaccgggggca...135...ttcttctcaag	cacataaa
C. Fam	aaaatggg	ggtcattcaaga...1485...gaggcagcactcacaggcaa	TGTTAAGTTCAAAAGGGC	aggggaaggaaccgggggca...135...ttttcctcaag	cacataaa
B. Tau	acagtgg	aatcatttaaga...1445...---cagcactaacaggccagtt	AAGTTCAAAAGGGC	aggggaaggaaccgggggca...135...ttttcctcaag	cacataaa
E. Cab	aaaatcgg	gatcattcaaga...1453...aaggcagcactaacaggcaa	TGTTAAGTTCAAAAGGGC	aggggaaggaactcggggca...135...ttttcctcaag	cacataaa
S. Sus	tcaattgg	aatccttcaaga...1411...gaggcagcactaacaggcaa	TGTTAAGTTCAAAAGGGC	aggggaaggaactgggggca...135...ttttcctcaag	cacataaa
O. Avi	acagtgg	aatcacttaaga...1446...---cagcactaacaggccagtt	AAGTTCAAAAGGGC	aggggaaggaaccgggggca...135...ttttcctcaag	cacataaa
L. Afr	aaaattaa	gattttcacaaga...1490...gagacagcactaacaggcaa	TGTTAAGTTCAAAAGGGC	aggggaaggaactagggaca...136...ttttcccaag	cacataaa
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id=731218 gene=ENSG00000172878 name=METAP1D segment=chr2.172926723_172928438.1 type=IN

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R. Mac	acaatcag	gtaagccttaca...938...ctttgggttatactgagaa	GCTTTT	TTGAagACTTg	AACA	aaaattgtgttttgacagtt...257...tttattcttcag	tagaaggg
P. Tro	acaatcag	gtaagccttaca...936...ctttgggttatactgagaa	GCTTTT	TTGAagACTTg	AACA	aaaattgtgttttgacagtt...257...tttattcttcag	tagaaggg
P. Abe	acaatcag	gtaagccttaca...935...ctttgggttatactgagaa	GCTTTT	TTGAagACTTg	AACA	aaaattgtgttttgacagtt...257...tttattcttcag	tagaaggg
C. Jac	acaatcag	gtaagccttaca...921...ctttgggttgatctgagaa	GCTTTT	TTGAagACTTg	AACA	aaaattgtgttttgacagtt...256...tttattcttcag	tggaaagg
M. Mus	acaatcag	gtaagccttgta...904...ctttgggttatactgagaa	GCTTTT	TTGAagACTTg	AACA	aaaattgtgttttgacagtt...257...tttattcttcag	tcgaaggg
R. Nor	acaatcag	gtaagccttgca...899...ctttgggttatactgagaa	GCTTTT	TTGAagACTTg	AACA	aaaattgtgttttgacagtt...257...tttattcttcag	tcgaaggg
C. Por	acaatcag	gtaagcctcaca...908...ctttgggttatactgagaa	GCTTTT	TTGAagACTTg	AACA	aaaattgtgttttgacagtt...257...tttattcttcag	tagaaggg
O. Cun	acaatcag	gtaagccttgca...924...ctttgggttatactgagaa	GCTTTT	TTGAagACTTg	AACA	aaaattgtgttttgacagtt...257...tttattcttcag	tggaaagg
C. Fam	acaatcag	gtaagcctgaca...939...ctttgggttatactgagaa	GCTTTT	TTGAagACTTg	AACA	aaaattgtgttttgacagtt...257...tttattcttcag	tcgaaggg
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O. Avi	acaatcag	gtaagccttaca...1361...ctttgggttatactgagaa	GCTTTT	TTGAagACTTg	AACA	aaaattgtgttttgacagtt...263...tttattcttcag	tagaaggg
L. Afr	acaatcag	gtaagccttaca...923...ctttgggttatactgagaa	GCTTTT	TTGAagACTTg	AACA	aaaattgtgttttgacagtt...257...tttattcttcag	tcgaaggg
	** *****	***** *	***** **	***** ***** ***** *****	*** *****	* *****	

id=731229 gene=ENSG00000172878 name=METAP1D segment=chr2.172935799_172937078.1 type=IN VIEW

Figure 724:



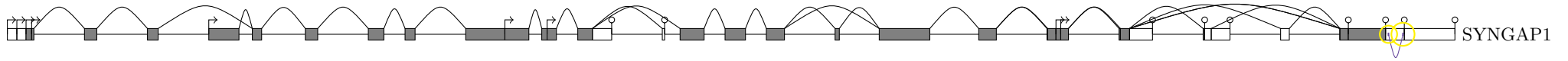
H. Sap	aaaattgt	gatgattcaaaa...1587...	ggtcggtgctccggcaggaa	GGGCAg	AGCTcc	ATGAAGCAGga	GGCTgtgtctg	aaaaaatgatccc...38...	ttttcctcaag	cacataaa
R. Mac	aaaatcgt	gatgattcaaaa...1577...	ggtcggtgctccggcaggaa	GGGCAg	AGCTcc	ATGAAGCAGta	GGCTgtgtctg	aaaaaatgatccc...38...	ttttcctcaag	cacataaa
P. Tro	aaaattgt	gatgattcaaaa...1587...	ggtcggtgctccggcaggaa	GGGCAg	AGCTcc	ATGAAGCAGga	GGCTgtgtctg	aaaaaatgatccc...38...	ttttcctcaag	cacataaa
P. Abe	aaaattgt	gatgattcaaaa...1588...	ggtcggtgctccggcaggaa	GGGCAg	AGCTcc	ATGAAGCAGga	GGCTgtgtctg	aaaaaatgatccc...38...	ttttcctcaag	cacataaa
C. Jac	aaaattgt	gatgattcaaaa...1584...	ggtcggtgctccggcaggaa	GGGCAg	AGCTcc	ATGAAGCAGga	GGCTgtgtctg	aaaaaatgatccc...38...	ttttcctcaag	cacataaa
C. Por	taaatcgg	gattattcaagg...1666...	ggtcgatgctccgcaggaa	GGGCAg	AGCTct	ATGAAGCAGga	GGCTgtgtctg	aaaaaatgatccc...38...	ttttcctcaag	catataaa
D. Cun	tcaactgg	ggtgattctaga...1624...	ggtcggtcctccggcaggaa	GGGCAg	AGCTcc	ATGAAGCAGga	GGCTgtgtccg	acaaaatgatccc...38...	ttcttctcaag	cacataaa
C. Fam	aaaatggg	ggtcattcaaga...1573...	ggtcggtgctccggcaggaa	GGGCAg	AGCTcc	ATGAAGCAGga	GGCTgtgtccg	acaaaatgatccc...38...	ttttcctcaag	cacataaa
B. Tau	acagttgg	aatcatttaaga...1529...	ggtcggtgctccggcaggaa	GGGCAg	AGCTcc	ATGAAGCAGga	GGCTgtgtg	cgaaaaatgatccc...38...	ttttcctcaag	cacataaa
E. Cab	aaaatcgg	gatcattcaaga...1541...	ggtcggtgctccggcaggaa	GGGCAg	AGCTcc	ATGAAGCAGga	GGCTgtgtccg	aaaaaatgatccc...38...	ttttcctcaag	cacataaa
S. Sus	tcaattgg	aatctttcaaga...1499...	ggtcggtgctccggcaggaa	GGGCAg	AGCTcc	ATGAAGCAGga	GGCTgtgtccc	aaaaaatgatccc...38...	ttttcctcaag	cacataaa
O. Avi	acagttgg	aatcacttaaga...1530...	ggtcggtgctccggcaggaa	GGGCAg	AGCTcc	ATGAAGCAGg	aggctgtgtg	cgaaaaatg----...43...	ttttcctcaag	cacataaa
L. Afr	aaaattaa	gatttctcaaga...1579...	ggtcggtgctccggcaggaa	GGGCAg	AGCTcc	ATGAAGCAGg	aggccgtgtc	ccgaaaaatg----...43...	ttttcccaag	cacataaa
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id=731218 gene=ENSG00000172878 name=METAP1D segment=chr2.172926723_172928438.1 type=IN

H. Sap	ttcttcag	tagaagggggcagaga	aactagattc	tattcaagcatt	ctatcgc	AGCTCTGC	ATTCATGGCTg	TGTCT	aaagggcatgtcagc	ctttgattctctctgagag	gtaattat
R. Mac	ttcttcag	tagaagggggcagaga	aactagattc	tattcaagcatt	ctatcgc	AGCTCTGC	ATTCATGGCTg	TGTCT	aaagggcatgtcagc	ctttgattctctctgagag	gtaattat
P. Tro	ttcttcag	tagaagggggcagaga	aactagattc	tattcaagcatt	ctatcgc	AGCTCTGC	ATTCATGGCTg	TGTCT	aaagggcatgtcagc	ctttgattctctctgagag	gtaattat
P. Abe	ttcttcag	tagaagggggcagaga	aactagattc	tattcaagcatt	ctatcgc	AGCTCTGC	ATTCATGGCTg	TGTCT	aaagggcatgtcagc	ctttgattctctctgagag	gtaattat
C. Jac	ttcttcag	tgaagggggcagaga	aactagattc	tattcaagcatt	ctatcgc	AGCTCTGC	ATTCATGGCTg	TGTCT	aaagggcatgtcagc	ctttgattctctctgagag	gtaattat
C. Por	ttcttcag	tagaagggggcagaga	aactagattc	tattcaagcatt	ctatcgc	AGCTCTGC	ATTCATGGCTg	TGTCT	aaagggcatgtcagc	ctttgattctctctgagag	gtaattat
D. Cun	ttcttcag	tgaagggggcagaga	aactagattc	tattcaagcatt	ctatcgc	AGCTCTGC	ATTCATGGCTg	TGTCT	aaagggcatgtcagc	ctttgattctctctgagag	gtaattat
C. Fam	ttcttcag	tcgaagggggcagaga	aactagattc	tattcaagcatt	ctatcgc	AGCTCTGC	ATTCATGGCTg	TGTCT	aaagggcatgtcagc	ctttgattctctctgagag	gtaattat
B. Tau	ttcttcag	tagaagggggcagaga	aactagattc	tattcaagcatt	ctatcgc	AGCTCTGC	ATTCATGGCTg	TGTCT	aaagggcatgtcagc	ctttgattctctctgagag	gtaattat
E. Cab	ttcttcag	tagaagggggcagaga	aactagattc	tattcaagcatt	ctatcgc	AGCTCTGC	ATTCATGGCTg	TGTCT	aaagggcatgtcagc	ctttgattctctctgagag	gtaattat
S. Sus	ttcttcag	tcgaagggggcagaga	aactagattc	tattcaagcatt	ctatcgc	AGCTCTGC	ATTCATGGCTg	TGTCT	aaagggcatgtcagc	ctttgattctctctgagag	gtaattat
O. Avi	ttcttcag	tagaagggggcagaga	aactagattc	tattcaagcatt	ctatcgc	AGCTCTGC	ATTCATGGCTg	TGTCT	aaagggcatgtcagc	ctttgattctctctgagag	gtaattat
L. Afr	ttcttcag	tcgaagggggcagaga	aactagattc	tattcaagcatt	ctatcgc	AGCTCTGC	ATTCATGGCTg	TGTCT	aaagggcatgtcagc	ctttgattctctctgagag	gtaattat
	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

id=731230 gene=ENSG00000172878 name=METAP1D segment=chr2.172937079_172937182.1 type=AN VIEW

Figure 725:



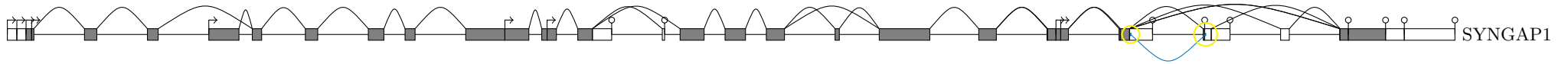
H. Sap	cccatcct	ctgcctc-atcg	TCCCCt	AGCAct	GGGGG	-acagac	-----cctc	acccccaccc	-----	..123..	ggggaccccggg	tgaggggg	
R. Mac	cccatcct	ctgcctc-atag	TCCCCt	AGCAct	GGGGG	-acagac	-----cctc	acccccaccc	-----	..122..	ggggaccccagg	tgaggggg	
P. Tro	cccatcct	ctgcctc-atcg	TCCCCt	AGCAct	GGGGG	-acagac	-----cctc	acccccaccc	-----	..123..	ggggaccccggg	tgaggggg	
P. Abe	cccatcct	ctgcctc-atcg	TCCCCt	AGCAct	GGGGG	-acagac	-----cctc	acccccaccc	-----	..123..	ggggaccccggg	tgaggggg	
M. Mus	cctgtcct	ctgcctc-atag	TCCCCt	AGCAct	GGGGG	-acagac	-----cctc	acccccacac	-----	..125..	ggggaccccggg	tgaggggg	
R. Nor	cccatcct	ctgcctc-acag	TCCCCt	AGCAct	GGGGG	-acagac	-----cctc	acccccacac	-----	..125..	ggggaccccggg	tgaggggg	
C. Por	cccatcct	ctgcctc-atcg	TCCCCt	AGCAct	GGGGG	-acagac	-----cctc	acccccacac	-----	..122..	ggggaccccggg	tgaggggg	
O. Cun	cccatcct	ctgcctc-atcg	TCCCCt	AGCAct	GGGGG	-acagac	-----cctc	acccccaccc	-----	..122..	ggggaccccggg	tgaggggg	
F. Cat	cccatcct	ctgcctc-atcg	TCCCCt	AGCAct	GGGGGACAG	-ac	-----cctc	gccccaccctggg	---	..118..	ggggaccccagg	tgaggggg	
B. Tau	cccatcct	ctgcctc-atcg	TCCCCt	AGCAct	GGGGGACAG	-ac	-----cctc	gccccaccctggg	---	..118..	ggggaccccagg	tgaggggg	
E. Cab	cccatcct	ctgcctc-atcg	TCCCCt	AGCAct	GGGGGACAG	-ac	-----cctc	gccccaccctggg	---	..118..	ggggaccccagg	tgaggggg	
S. Sus	cccatcct	ctgcctcaatag	TCCCCt	AGCAct	GGGGGACA	---	-----cctc	gccccaccctgggg	..	..116..	ggggaccccagg	tgaggggg
L. Afr	cccatcct	ctgcctc-atcg	TCCCCt	AGCAct	GGGGG	-----	acagac	cctc	gccccaccct	-----	..121..	ggggaccccagg	tgaggggg
**	***	*****	*	*	*****	*	*	****	*****	*	*****	**	

id=439380 gene=ENSG00000197283 name=SYNGAP1 segment=chr6_33419988_33420172.1 type=EN

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R. Mac	cccatcct	ctgcctcatagt	..123..	-----ccattttggcctcccctgc	CCCCCt	TGTTat	GGGGAG	gggaccccagg	tgaggggg
P. Tro	cccatcct	ctgcctcatcgt	..124..	-----ccattttggcctcccctgc	CCCCCt	TGTTat	GGGGAG	gggaccccggg	tgaggggg
P. Abe	cccatcct	ctgcctcatcgt	..124..	-----ccattttggcctcccctgc	CCCCCt	TGTTat	GGGGAG	gggaccccggg	tgaggggg
M. Mus	cctgtcct	ctgcctcatagt	..126..	-----ccattttggcctcccctgc	CCCCCt	TGTTat	GGGGAG	gggaccccggg	tgaggggg
R. Nor	cccatcct	ctgcctcacagt	..126..	-----ccattttggcctcccctgc	CCCCCt	TGTTat	GGGGAG	gggaccccggg	tgaggggg
C. Por	cccatcct	ctgcctcatcgt	..123..	-----ccattttggcctcccctgc	CCCCCt	TGTTat	GGGGAG	gggaccccggg	tgaggggg
O. Cun	cccatcct	ctgcctcatcgt	..123..	-----ccattttggcctcccctgc	CCCCCt	TGTTat	GGGGAG	gggaccccggg	tgaggggg
F. Cat	cccatcct	ctgcctcatcgt	..119..	..cgccccattttggcctccc-	CTGTCCCCCt	TGTTat	GGGGAG	gggaccccagg	tgaggggg
B. Tau	cccatcct	ctgcctcatcgt	..119..	..cgccccattttggcctccc-	CTGTCCCCCt	TGTTat	GGGGAG	gggaccccagg	tgaggggg
E. Cab	cccatcct	ctgcctcatcgt	..119..	..cgccccattttggcctccc-	CTGTCCCCCt	TGTTat	GGGGAG	gggaccccggg	tgaggggg
S. Sus	cccatcct	ctgcctcaatag	..117..	..cgccccattttggcctccc-	TGTCCCCCt	TGTTat	GGGGAG	gggaccccggg	tgaggggg
L. Afr	cccatcct	ctgcctcatcgt	..122..	-----ccattttggcctcccctgc	CCCCCt	TGTTat	GGGGAG	gggaccccagg	tgaggggg
**	***	*****		*****	*****	*****	*****	*****	**

id=439380 gene=ENSG00000197283 name=SYNGAP1 segment=chr6_33419988_33420172.1 type=EN VIEW

Figure 726:



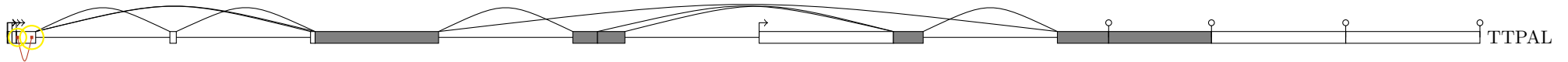
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R. Mac	acgc-----TCAG	GtGGAAATTAC	aatgtcatttatcttctccg-----	..184..	tgtgcc-ttcca	tccagtct
P. Tro	acgc-----TCAG	GtGGAAATTAC	aatgtcatttatcttctccg-----	..184..	tgtgcc-ttcca	tccagtct
P. Abe	acgc-----TCAG	GtGGAAATTAC	aatgtcatttatcttctccg-----	..184..	tgtgcc-ttcca	tccagtct
C. Jac	acgc-----TCAG	GtGGAAATTAC	aatgtcatttatcttctccg-----	..184..	tgtgcc-ttcca	tccagtct
M. Mus	acgc-----TCAG	GtGGAAATTAC	aatgtcatttatcttctccg-----	..162..	tgtgcc-ttccg	tccagtct
R. Nor	acgc-----TCAG	GtGGAAATTAC	aatgtcatttatcttctccg-----	..170..	tgtgcc-ttccg	tccagtct
C. Por	acgc-----TCAG	GtGGAAATTAC	aatgtcatttatcttctccg-----	..168..	cgtgcc-ttccg	tccagtct
C. Fam	acgctcaggtggaattacaatgtcatttatcttctccggtgccatcccCATCcaTCCCa	CTGTCCTTTGT	gactcactgcaccagccac-----	..132..	tgtgcc-ttcta	tccagtct
F. Cat	acgctcaggtggaattacaatgtcatttatcttctccggtgccatcccCATCcaTCCCa	CTGTCCTTCGT	gactcactgcaccagccac-----	..112..	tgtgcc-ttcta	tccagtct
B. Tau	acgctcaggtggaattacaatgtcatttatcttctccggtgccatcccCATCcaTCCCa	CTGTCCTTCGT	gactcactgcaccagccac-----	..136..	tgtgcc-ttcca	tccagtct
E. Cab	acgctcaggtggaattacaatgtcatttatcttctccggtgccatcccCATCcaTCCCa	CTGTCCTTCGT	gactcactgcaccagccac-----	..134..	cgtgcc-ttcca	tccagtct
S. Sus	acgctcaggtggaattacaatgtcatttatcttctccggtgccatcccCATCcaTCCCa	CTGTCCTTTGT	gactcact-gccacccagc... .90...-gcgtcagcccca	..90..	-gcgtcagcccca	tccagtct
L. Afr	acgctcaggtggaattacaatgtcatttatcttctccggtgccatcccCATCcaTCCCa	CTGTCCTTTGT	gactcactgcaccagccac-----	..134..	tgtgcc-ttcca	tccagtct
****		*	** * *** *		*	* *

id=439369 gene=ENSG00000197283 name=SYNGAP1 segment=chr6_33415711_33415937_1 type=AN

H. Sap	tcag-----GTAA	TTCTCCTGG	ttccgctttggccacgggaggacacaggggaggtgactcggaccactgcag	gttggtcg
R. Mac	tcag-----GTAA	TTCTCCTGG	ttccgctttggccacgggaggacacaggggaggtgactcggaccactgcag	gttggtca
P. Tro	tcag-----GTAA	TTCTCCTGG	ttccgctttggccacgggaggacacaggggaggtgactcggaccactgcag	gttggtcg
P. Abe	tcag-----GTAA	TTCTCCTGG	ttccgctttggccacgggaggacacaggggaggtgactcggaccactgcag	gttggtcg
C. Jac	tcag-----GTAA	TTCTCCTGG	ttccgctttggccacgggaggacacaggggaggtgactcggaccactgcag	gttggtcg
M. Mus	tcag-----GTAA	TTCTCCTGG	ttccgctttgaccacgggaggacactggggaggtgactcggaccactgcag	gttggtgg
R. Nor	tcag-----GTAA	TTCTCCTGG	ttccgctttgaccacgggaggacactggggaggtgactcggaccactgcag	gttggtgg
C. Por	tcag-----GTAA	TTCTCCTGG	ttccgctttgaccacgggaggacacaggggaggtgactcggaccactgcag	gttggtca
C. Fam	tcaggtaattctcctggttc--ctttgaccacggGCGGAG	GacACAGGGGAGGTG	-----actcggaccactgcag	gttggtca
F. Cat	tcaggtaattctcctggttcgctttgaccacggGCGGAG	GacACAGGGGAGGTG	-----actcggaccactgcag	gttggtcg
B. Tau	tcaggtaattctcctggttcgctttgaccacggGCGGAG	GacACAGGGGAGGTG	-----actcggaccactgcag	gttggtcg
E. Cab	tcaggtaattctcctggttcgctttgaccacggGCGGAG	GacACAGGGGAGGTG	-----actcggaccactgcag	gttggtca
S. Sus	tcaggtaattctcctggttcgctttgaccACGGGCGGAG	GacACAGGGGAGGTG	-----actcggaccactgcag	gttggtca
L. Afr	tcaggtaattctcctggttcgctttgaccacggGCGGAG	GacACAGGGGAGGTG	-----actcggaccactgcag	gttggtcg
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id=439372 gene=ENSG00000197283 name=SYNGAP1 segment=chr6_33416581_33416645_1 type=AN VIEW

Figure 727: CS=4.2



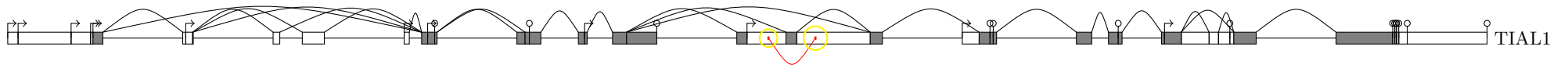
H. Sap	gggcaggc	CGGGCag	GGAGTGCGG	GTCGGTTc
R. Mac	ggg CCGGC	CGGGCag	GGAGTGCGG	GTCGGTTc
P. Tro	gggcaggc	CGGGCag	GGAGTGCGG	GTCGGTTc
P. Abe	ggg CCGGC	CGGGCag	GGAGTGCGG	GTCGGTTc
M. Mus	gg GCCGGC	CGGCCGGGAGTGCGG	GTCgtttc	
R. Nor	ggg CCGGc	CGGctGTGGAGTGCGG	GTCgtttc	
C. Por	gg GCTG gc	CGGGcCGGGAGTGCGG	GTCttttc	
O. Cun	gggcccggc	cGGCagGGAGTGCGG	GTCgtttc	
C. Fam	gggcccggc	cGGCcgGGAGTGCGG	GTCggctc	
F. Cat	gggcccggc	cggaaagGGAGTGCGG	GTCGGTTt	
B. Tau	gggcccggc	tGGCagGGAGTGCGG	GTCgtttc	
E. Cab	gggcccggc	cGGCagGGAGTGCGG	GTCgcttc	
S. Sus	gggcccggc	cGGCagGGAGTGCGG	GTCgcttc	
O. Avi	gggcccggc	tGGCagGGAGTGCGG	GTCGGTTc	
L. Afr	ggccaggc	cgggaaaGGAGTGCGG	GTCGGttc	
	** * **	** *****	*** *	

id=715074 gene=ENSG00000124120 name=TTPAL segment=chr20.43104544.43104559.1 type=E5

H. Sap	gagtgcgg	gtcgg-ttctg	cgctgcgctg-c	cgagcaggctccc	cgccg GATTGACCCGGCTCCG-CCCG	--tagtcggg	ccg	gtgagtgc
R. Mac	gagtgcgg	gtcgg-ttctg	tgccgctg-c	cgagcaggctccc	cgccg GATTGACCCGGCTCCG-CCCG	ta GCCGG	---gccg	gtgagtgc
P. Tro	gagtgcgg	gtcgg-ttctg	cgctgcgctg-c	cgagcaggctccc	cgccg GATTGACCCGGCTCCG-CCCG	--tagtcggg	ccg	gtgagtgc
P. Abe	gagtgcgg	gtcgg-ttctg	cgccgctg-c	cgagcaggctccc	cgccg GATTGACCCGGCTCCG-CCCG	ta GTCGG	---gccg	gtgagtgc
M. Mus	gagtgcgg	gtctg-ttctg	cgccgctg-c	cgagcaggctcctg	ccg GACCCGGCTCCG-CCCG	cc GCCGGGCTGGT	--gagtgc	
R. Nor	gagtgcgg	gtctg-ttctg	cgccgctg-c	cgagcaggctcctg	ccg GACCCGGCTCCG-CccGCCGGG	---gccg	gtgagtgc	
C. Por	gagtgcgg	gtctt-ttctg	tgctgcgctg-c	cgagcaggctccc	cgccg GACCCGGCTCCGCCCCGAGCC	---gggccc	gtgagtgc	
O. Cun	gagtgcgg	gtctg-ttctg	tgccgctg-c	cgagcaggctccc	cgccg GACCCGGCTCCGTCC	---cgtagccggg	ccg	gtgagtgc
C. Fam	gagtgcgg	gtcgg-ctctg	tgccgctg-c	cgagcaggctccc	actg GACCCGGCTCCG-CCC	cgtagccggg	ccg	gtgagtgc
F. Cat	gagtgcgg	gtcggtttctg	tgctgcgctg-c	cgagcaggctccc	cgccg GATTGACCCGGCTCCG	---gccccgtag	ccgggccc	gtgagtgc
B. Tau	gagtgcgg	gtctg-ttctg	tgccgctg-c	cgagcaggctccc	cgccg GACCCGGCTCCG-CCC	--cgtagccggg	ccg	gtgagtgc
E. Cab	gagtgcgg	gtcgc-ttctg	cgccgctg-c	cgagcaggctccc	cgccg TGACCCGGCTCCG-CCC	--cgtagccggg	ccg	gtgagtgc
S. Sus	gagtgcgg	gtcgc-ttctg	tgtaagctg-c	cgagcaggctccc	cgccg TGACCCGGCTCCG-CCC	--cgtagccggg	ccg	gtgagtgc
O. Avi	gagtgcgg	gtcgg-ttctg	tgccgctg-c	cgagcaggctccc	cgccg GATTGACCCGGCTCCG-CCC	--cgtagccggg	ccg	gtgagtgc
L. Afr	gagtgcgg	gtcgg-ttctg	tgccgctg-c	cgagcaggctccc	cgccg TGACCCGGCTCCG	---gccccgtag	ccgggccc	gtgagtgc
	*****	***	**** * * **	* * * * * * * *	*****	*		*****

id=715075 gene=ENSG00000124120 name=TTPAL segment=chr20.43104560.43104631.1 type=E5 VIEW

Figure 728:



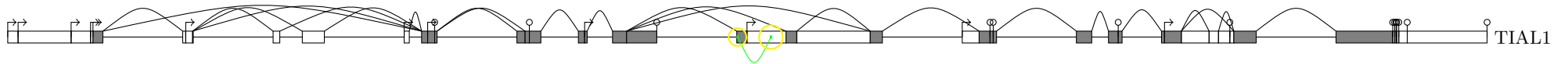
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R. Mac	ctggaact	cagttgtagatt...87...agttctatattccaatcat-TTAACtTACTcACTAaaatttctgtgtaaattgt...78...caaaatttacag	ctgcccaa
P. Abe	ctggaact	cagttgtagatt...87...agttctatattccaatcat-TTAACtTACTcACTAaaatttctgtgtaaattgt...78...caaaatttacag	ctgcccaa
C. Jac	ctggaact	cagttgtagatt...87...agttctatattccaatcat-TTAACtTACTcACTAaaatttctgtgtaaattgt...78...caaaatttacag	ctgcccaa
M. Mus	ctggaact	cagttgtagatt...88...-gttctatattccaatcattTTAACtTACTcACTAaaatttctgtgtaaattgt...78...caaaatttacag	ctgcccaa
R. Nor	ctggaact	cagttgtagatt...88...-gttctatattccaatcattTTAACtTACTcACTAaaatttctgtgtaaattgt...78...caaaatttacag	ctgcccaa
C. Por	ctggaact	cagttgtagatt...88...-gttctatattccaatcattTTAACtTACTcACTAaaatttctgtgtaaattgt...78...caaaatttacag	ctgcccaa
O. Cun	ctggaact	cagttgtagatt...87...-gttctatattccaatcattTTAACtTACTcACTAaaatttctgtgtaaattgt...78...caaaatttacag	ctgcccaa
C. Fam	ctggaact	cagttgtagatt...87...-gttctatattccaatcattTTAACtTACTcACTAaaatttctgtgtaaattgt...78...caaaatttacag	ctgcccaa
B. Tau	ctggaact	cagttgtagatt...87...-gttctatattccaatcattTTAACtTACTcACTAaaatttctgtgtaaatctgt...78...caaaatttacag	ctgcccaa
E. Cab	ctggaact	cagttgtagatt...87...-gttctatattccaatcattTTAACtTACTcACTAaaatttctgtgtaaattgt...78...caaaatttacag	ctgcccaa
S. Sus	ctggaact	cagttgtagatt...87...-gttctatattccaatcattTTAACtTACTcACTAaaatttctgtgtaaattgt...78...caaaatttacag	ctgcccaa
L. Afr	ctggaact	cagttgtagatt...87...-gttctatattccaatcattTTAACtTACTcACTAaaatttctgtgtaaattgt...78...caaaatttacag	ctgcccaa
*****	***** **	***** **	***** *****

id=126963 gene=ENSG00000151923 name=TIAL1 segment=chr10.121340051.121340294_-1 type=AN

H. Sap	caggccat	gtatgcctttt...70...ttaaactatt--tagagattgcaTGGTaaAGTAGTTAGtattgttacagtaattata...311...ttcctttcacag	ggatgccc
R. Mac	caggccat	gtatgcctttt...70...ttaaactatt--tagagattgcaTGGTaaAGTAGTTAGtattgttacagtaattata...311...ttcctttcacag	ggatgccc
P. Abe	caggccat	gtatgcctttt...70...ttaaactatt--tagagattgcaTGGTaaAGTAGTTAGtattgttacagtaattata...311...ttcctttcacag	ggatgccc
C. Jac	caggccat	gtatgcctttt...70...ttaaactatt--tagagattgcaTGGTaaAGTAGTTAGtattgttacagtaattata...311...ttcctttcacag	ggatgccc
M. Mus	caggccat	gtatgcctttt...70...ttaaactatt--tagatattgcaTGGTaaAGTAGTTAGcattgttacagtaattata...311...ttcctttcacag	ggatgccc
R. Nor	caggccat	gtatgcctttt...70...ttaaactatt--tagatattgcaTGGTaaAGTAGTTAGcattgttacagtaattata...309...ttcctttcacag	ggatgccc
C. Por	caggccat	gtatgcctttt...70...ttaaactatt--tagagattgcaTGGTaaAGTAGTTAGcattgttacagtaattata...311...ttcctttcacag	ggatgctc
O. Cun	caggccat	gtatgcctttt...72...-aaactatttagagattgcaTGGTaaAGTAGTTAGcattgttacagtaattata...312...ttcctttcacag	ggatgccc
C. Fam	caggccat	gtatgcctttt...70...ttaaactatt--tagagattgcaTGGTaaAGTAGTTAGcattgttacagtaattata...312...ttcctttcacag	ggatgccc
B. Tau	caggccat	gtatgcctttt...70...ttaaactatt--tagagattgcaTGGTaaAGTAGTTAGcattgttacagtaattata...312...ttcctttcacag	ggatgccc
E. Cab	caggccat	gtatgcctttt...70...ttaaactatt--tagagattgcaTGGTaaAGTAGTTAGcattgttacagtaattata...312...ttcctttcacag	ggatgccc
S. Sus	caggccat	gtatgcctttt...70...ttaaactatt--tagaaattgcaTGGTaaAGTAGTTAGcattgttacagtaattata...312...ttcctttcacag	ggatgccc
L. Afr	caggccat	gtatgcctttt...70...ttaaactatt--tagagattgcaTGGTaaAGTAGTTAGcattgttacagtaactata...313...ttcctttcacag	ggatgccc
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id=126965 gene=ENSG00000151923 name=TIAL1 segment=chr10.121339523.121339982_-1 type=AN VIEW

Figure 729:



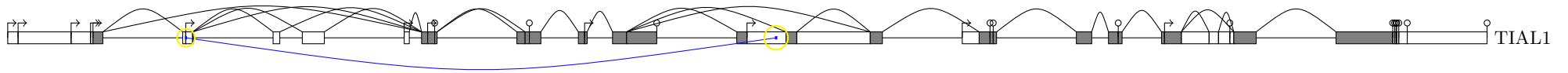
H.Sap	-cagtgtct	tgggg-tctcgtt...840...aattaaagtaaatagcattc	TGGTtATTTGCAG	AATTgctc
R.Mac	-cagtgtct	tgggg-tctcgtt...843...aattaaagtaaatagcattc	TGGTtATTTGCAG	AATTgctc
P.Tro	-cagtgtct	tgggg-tctcgtt...843...aattaaagtaaatagcattc	TGGTtATTTGCAG	AATTgctc
P.Abe	-cagtgtct	tgggg-tctcgtt...838...aattaaagtaaatagcattc	TGGTtATTTGCAG	AATTgctc
C.Jac	-cagtgtct	tgggg-tctcgtt...828...aattaaagtaaatagcattc	TGGTtATTTGCAG	AATTgctc
M.Mus	tcaatg-tt	tgggg-tcttgtt...788...aattaaagtaaatagcattc	TGGTtATTTGCAG	AATTgctc
R.Nor	tcaatg-tt	tgggg-tcttgtt...789...aattaaagtaaatagcattc	TGGTtATTTGCAG	AATTgctc
C.Por	-gaatgttt	taggg-tcttgtt...776...aattaaagtaaatagcattc	TGGTtATTTGCAG	AATTgctc
O.Cun	-cagtgttt	ttgagctcgtgt...841...aattaaagtaaatagcattc	TGGTtATTTGCAG	AATTgctc
C.Fam	-caatgttt	tgggg-tcttgtt...829...aattaaagtaaatagcattc	TGGTtATTTGCAG	AATTgctc
B.Tau	-caatgttt	tgggg-tcttgtt...801...aattaaagtaaatagcattc	TGGTtATTTGCAG	AATTgctc
E.Cab	-cagtgttt	tgggg-tcttgtt...847...aattaaagtaaatagcattc	TGGTtATTTGCAG	AATTgctc
S.Sus	-cagtgttt	tgggg-tcttgtt...836...aattaaagtaaatagcattc	TGGTtATTTGCAG	AATTgctc
L.Afr	-caatgttt	tgggg-tcttgtt...842...aattaaagtaaatagcattc	TGGTtATTTGCAG	AATTgctc
	* * * *	* * * * * *	*****	*****

id=126961 gene=ENSG00000151923 name=TIAL1 segment=chr10_121340359_121341244_-1 type=IN

H.Sap	ctggaact	cagttgtagatt...103...tcatttaacttactcactaa	AATTtCTGTGtAAATttGTTG	ttttcgtactggtgtgctta...56...caaaatttacag	ctgcccaa
R.Mac	ctggaact	cagttgtagatt...103...tcatttaacttactcactaa	AATTtCTGTGtAAATttGTTG	ttttcgtactggtgtgctta...56...caaaatttacag	ctgcccaa
P.Tro	ctggaact	cagttgtagatt...103...tcatttaacttactcactaa	AATTtCTGTGtAAATttGTTG	ttttcgtactggtgtgctta...56...caaaatttacag	ctgcccaa
P.Abe	ctggaact	cagttgtagatt...102...tcatttaacttactcactaa	AATTtCTGTGtAAATttGTTG	ttttcgtactggtgtgctta...56...caaaatttacag	ctgcccaa
C.Jac	ctggaact	cagttgtagatt...103...tcatttaacttactcactaa	AATTtCTGTGtAAATttGTTG	ttttcgtactggtgtgctta...56...caaaatttacag	ctgcccaa
M.Mus	ctggaact	cagttgtagatt...104...cattttaacttactcactaa	AATTtCTGTGtAAATttGTTG	ttttcgtactggtgtgctta...56...caaaatttacag	ctgcccaa
R.Nor	ctggaact	cagttgtagatt...104...cattttaacttactcactaa	AATTtCTGTGtAAATttGTTG	ttttcgtactggtgtgctta...56...caaaatttacag	ctgcccaa
C.Por	ctggaact	cagttgtagatt...104...cattttaacttactcactaa	AATTtCTGTGtAAATttGTTG	ttttcgtactggtgtgctta...56...caaaatttacag	ctgcccaa
O.Cun	ctggaact	cagttgtagatt...103...cattttaacttactcactaa	AATTtCTGTGtAAATttGTTG	ttttcgtactggtgtgctta...56...caaaatttacag	ctgcccaa
C.Fam	ctggaact	cagttgtagatt...103...cattttaacttactcactaa	AATTtCTGTGtAAATttGTTG	ttttcgtactggtgtgctta...56...caaaatttacag	ctgcccaa
B.Tau	ctggaact	cagttgtagatt...103...cattttaacttactcactaa	AATTtCTGTGtAAATttGTTG	ttttcgtactggtgtgctta...56...caaaatttacag	ctgcccaa
E.Cab	ctggaact	cagttgtagatt...103...cattttaacttactcactaa	AATTtCTGTGtAAATttGTTG	ttttcgtactggtgtgctta...56...caaaatttacag	ctgcccaa
S.Sus	ctggaact	cagttgtagatt...103...cattttaacttactcactaa	AATTtCTGTGtAAATttGTTG	ttttcgtactggtgtgctta...56...caaaatttacag	ctgcccaa
L.Afr	ctggaact	cagttgtagatt...103...cattttaacttactcactaa	AATTtCTGTGtAAATttGTTG	ttttcgtactggtgtgctta...56...caaaatttacag	ctgcccaa
	*****	***** **	*****	*****	*****

id=126963 gene=ENSG00000151923 name=TIAL1 segment=chr10_121340051_121340294_-1 type=AN VIEW

Figure 730: CS=4.2



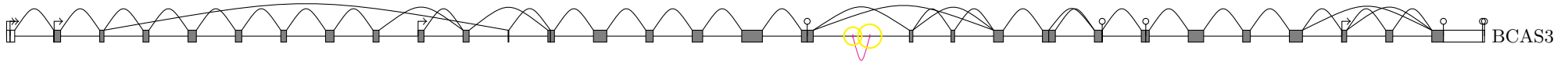
H.Sap	tcctgcag	acacac	ACAAGCTAAGACA	TATGGTtc
R.Mac	tcctgcag	acacac	ACAAGCTAAGACA	TATGGTtc
P.Tro	tcctgcag	acacac	ACAAGCTAAGACA	TATGGTtc
P.Abe	tcctgcag	acacac	ACAAGCTAAGACA	TATGGTtc
C.Jac	tcctgcag	acacac	ACAAGCTAAGACA	TATGGTtc
M.Mus	tcctacag	acacac	ACAAGCTAAGACA	TATGGTta
R.Nor	tcctgcag	acacac	ACAAGCTAAGACA	TATGGTta
C.Por	tcctgcag	acacac	ACAAGCTAAGACA	TATGGTtc
O.Cun	tcctgcag	acatac	ACAaCTAAGACA	TATGGTtc
C.Fam	tcctgcag	acacac	ACAAGCTAAGACA	TATGGTtc
B.Tau	tcctgcag	acacac	ACAAGCTAAGACA	TATGGTtc
E.Cab	tcctgcag	acacac	ACAAGCTAAGACA	TATGGTtc
S.Sus	tcctgcag	acacac	ACAAGCTAAGACA	TATGGTtc
L.Afr	tcctgcag	acacac	ACAAGCTAAGACA	TATGGTtc
	**** **	***	***** *****	*****

id=126938 gene=ENSG00000151923 name=TIAL1 segment=chr10.121353007.121353025.-1 type=AN

H.Sap	ctggaact	cagttgtagatt...131...tgtaaatttggtgtttcgt	ACTGGTGTGCTTAGCa	TTGT	tgtagttttttatttcct...29...caaaatttacag	ctgcccaa
R.Mac	ctggaact	cagttgtagatt...131...tgtaaatttggtgtttcgt	ACTGGTGTGCTTAGCa	TTGT	tgtagttttttatttcct...29...caaaatttacag	ctgcccaa
P.Tro	ctggaact	cagttgtagatt...131...tgtaaatttggtgtttcgt	ACTGGTGTGCTTAGCa	TTGT	tgtagttttttatttcct...29...caaaatttacag	ctgcccaa
P.Abe	ctggaact	cagttgtagatt...130...tgtaaatttggtgtttcgt	ACTGGTGTGCTTAGCa	TTGT	tgtagttttttatttcct...29...caaaatttacag	ctgcccaa
C.Jac	ctggaact	cagttgtagatt...131...tgtaaatttggtgtttcgt	ACTGGTGTGCTTAGCa	TTGT	tgtagttttttatttcct...29...caaaatttacag	ctgcccaa
M.Mus	ctggaact	cagttgtagatt...132...tgtaaatttggtgtttcgt	ACTGGTGTGCTTAGCa	TTGT	tgtagttttttatttcct...29...caaaatttacag	ctgcccaa
R.Nor	ctggaact	cagttgtagatt...132...tgtaaatttggtgtttcgt	ACTGGTGTGCTTAGCa	TTGT	tgtagttttttatttcct...29...caaaatttacag	ctgcccaa
C.Por	ctggaact	cagttgtagatt...132...tgtaaatttggtgtttcgt	ACTGGTGTGCTTAGCa	TTGT	tgtagttttttatttcct...29...caaaatttacag	ctgcccaa
O.Cun	ctggaact	cagttgtagatt...131...tgtaaatttggtgtttcgt	ACTGGTGTGCTTAGCa	TTGT	tgtagttttttatttcct...29...caaaatttacag	ctgcccaa
C.Fam	ctggaact	cagttgtagatt...131...tgtaaatttggtgtttcgt	ACTGGTGTGCTTAGCa	TTGT	tgtagttttttatttcct...29...caaaatttacag	ctgcccaa
B.Tau	ctggaact	cagttgtagatt...131...tgtaaatttggtgtttcgt	ACTGGTGTGCTTAGCa	TTGT	tgtagttttttatttcct...29...caaaatttacag	ctgcccaa
E.Cab	ctggaact	cagttgtagatt...131...tgtaaatttggtgtttcgt	ACTGGTGTGCTTAGCa	TTGT	tgtagttttttatttcct...29...caaaatttacag	ctgcccaa
S.Sus	ctggaact	cagttgtagatt...131...tgtaaatttggtgtttcgt	ACTGGTGTGCTTAGCa	TTGT	tgtagttttttatttcct...29...caaaatttacag	ctgcccaa
L.Afr	ctggaact	cagttgtagatt...131...tgtaaatttggtgtttcgt	ACTGGTGTGCTTAGCa	TTGT	tgtagttttttatttcct...29...caaaatttacag	ctgcccaa
	*****	***** **	*****	*****	*****	*****

id=126963 gene=ENSG00000151923 name=TIAL1 segment=chr10.121340051.121340294.-1 type=AN VIEW

Figure 731:



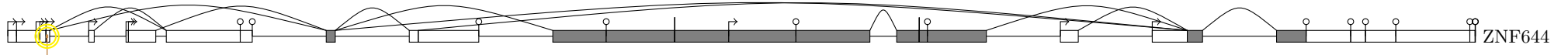
H.Sap	cgaaccgg	gtaaggccttag...4718...	-aatactacaggggtgctcca	GAAAAGGGGGAGAAAT	-agaaaatTTTg-aatctctaa-----	...191...	tTtccatgaag	gccttatc
R.Mac	cgaacagg	gtaaggccttag...4718...	-aatactacaggggtgctcca	GAAAAGGGGGAGAAATAGAAAATT	-tg-aatccctaactctgaaa...	182...	tTtccatgaag	gccttatc
P.Tro	cgaaccgg	gtaaggccttag...4718...	-aatactacaggggtgctcca	GAAAAGGGGGAGAAAT	-agaaaatTTTg-aatctctaa-----	...191...	tTtccatgaag	gccttatc
P.Abe	cgaaccgg	gtaaggccttag...4718...	-aatactacaggggtgctcca	GAAAAGGGGGAGAAAT	-agaaaatTTTg-aatccctaa-----	...191...	tTtccatgaag	gccttatc
C.Jac	cgaacagg	gtaaggccttag...4717...	-aatattacaggggtatcca	GAAAAGGGGGAGAAATagATAA	-tTTTg-aatccctaactctca--	...186...	tTtccatgaag	gccttatc
M.Mus	cgaacagg	gtaaggccttag...4719...	-agtgccacaggggtgctcca	GAAAAGGGGGAGAAATag	-aaaaaaatcaaactctaca-----	...190...	tTtccaccaag	gccttatc
R.Nor	cgaacagg	gtaaggccttag...4722...	-aagtgcttcaggggtgctcca	AGAAAAGGGGGAGAAAT	agaaaaaaatcaaactccac-----	...186...	tTtctaccaag	gccttatc
C.Por	cggacagg	gtaaggcacctg...4732...	-agcattacaggggtgctcca	GAAAAGGGGGAGAAATag	-aaaaaatttaaactctta-----	...177...	tTtccatgaag	gccttatc
O.Cun	cgaacagg	gtaagaccttag...4720...	-aatgctacaggggtgctcca	GAAAAGGGGGAGAAAT	-agaaaatTTTg-aatcccta-----	...189...	tTtccatgaag	gccttatc
C.Fam	cgaacagg	gtaagaccttag...4710...	-aacctccacaggggtatcca	GAAAAGGGGGAGAAAT	-agacattTTTgaaatctgca-----	...199...	tTtccatgaag	gccttatc
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E.Cab	cgaacagg	gtaaggccttag...4710...	-aacctacaggggtgctcca	GAAAAGGGGGAGAAAT	-agaacattTTTgaaatct-a-----	...199...	tTtccatgaag	gccttatc
O.Avi	cgaacagg	gtaaggccttag...4709...	-aacctacaggggtgctcca	GAAAAGGGGGAGAAAT	-cagagcattTTTgaaatctgg-----	...201...	tTtccatgaag	gccttatc
L.Afr	cgaacagg	gtaaggccttag...4729...	-agtccataggggtgctcca	GAAAAGGGGGAGAAAT	-agaaaatTTTg-aatcccta-----	...180...	tTtccatgaag	gccttatc
	** ** *	**** *	*	* ** * ***** **	* **		**** * **	** ** *

id=238886 gene=ENSG00000141376 name=BCAS3 segment=chr17_59093263_59104226.1 type=IN

H.Sap	cgaaccgg	gtaaggccttag...4934...	-----tTtctctaat-tTtTgtgc-----	ATTTTCCCCCTTTTC	catgaag	gccttatc
R.Mac	cgaacagg	gtaaggccttag...4923...	-----tgTtaaTgagTtTtctct	AATTtTTTgc	ATTTTCCCCCTTTTC	catgaag
P.Tro	cgaaccgg	gtaaggccttag...4934...	-----tTtctctaat-tTtTgtgc-----	ATTTTCCCCCTTTTC	catgaag	gccttatc
P.Abe	cgaaccgg	gtaaggccttag...4934...	-----tTtctctaat-tTtTgtgc-----	ATTTTCCCCCTTTTC	catgaag	gccttatc
C.Jac	cgaacagg	gtaaggccttag...4928...	atgagTtTtctctaat-tTt	TTGTgc	ATTTTCCCCCTTTTC	catgaag
M.Mus	cgaacagg	gtaaggccttag...4934...	-----tTtctctaat-tTtTgtgc-----	ATTTTCCCCCTTTTC	caccaag	gccttatc
R.Nor	cgaacagg	gtaaggccttag...4935...	-----tTtctctaat-tTtTgtgc-----	ATTTTCCCCCTTTTC	-accaag	gccttatc
C.Por	cggacagg	gtaaggcacctg...4935...	-----tTtctctaat-tTtTgtgc-----	ATTTTCCCCCTTTTC	-catgaag	gccttatc
O.Cun	cgaacagg	gtaagaccttag...4934...	-----tTtctctaat-tTtTgtgc-----	ATTTTCCCCCTTTTC	catgaag	gccttatc
C.Fam	cgaacagg	gtaagaccttag...4934...	-----tTtctctaat-tTtTgtgc-----	ATTTTCCCCCTTTTC	catgaag	gccttatc
B.Tau	cgaacagg	gtaaggccttag...4935...	-----cctctaataTtTtTgtgca-----	TTTTCCCCCTTTTC	catgaag	gccttatc
E.Cab	cgaacagg	gtaaggccttag...4935...	-----tTtctctaat-tTtTgtgca-----	TTTTCCCCCTTTTC	catgaag	gccttatc
O.Avi	cgaacagg	gtaaggccttag...4935...	-----tTtctctaat-tTtTgtgca-----	TTTTCCCCCTTTTC	catgaag	gccttatc
L.Afr	cgaacagg	gtaaggccttag...4934...	-----tTtctctaat-tTtTgtgc-----	ATTTTCCCCCTTTTC	catgaag	gccttatc
	** ** *	**** *	* ** *		**** ** * ** * **	** ** *

id=238886 gene=ENSG00000141376 name=BCAS3 segment=chr17_59093263_59104226.1 type=IN VIEW

Figure 732: CS=16.8



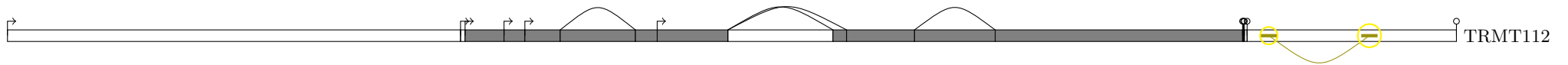
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R. Mac	acagaacg	gcgtgtgacgcggggacgccgcgctcccaa	CGTCGccCC	GGttTGAc
P. Abe	acagagcg	gcgtgtgacgcggggacgccgcgctcccaa	CGTCGccCC	GGttTGAc
C. Jac	acagagcg	gcgtgtgacgcggggacgccgcgctcccaa	CGTCGccCC	GGttTGAc
M. Mus	acagagcg	gcgtgtgacgcggggacgccgcgctcccaa	CGTCGccCC	GGttTGAc
R. Nor	acagagcg	gcgtgtgacgcggggacgccgcgctcccaa	CGTCGccCC	GGttTGAc
C. Por	acagagcg	gcgtgtgacgcggggacgccgcgctcccaa	CGTCGccCC	GGttTGAc
U. Cun	acagagcg	gcgtgtgacgcggggacgccgcgctcccaa	CGTCGccCC	GGttTGAc
C. Fam	acagagcg	gcgtgtgacgcggggacgccgcgctcccaa	CGTCGccCC	GGttTGAc
F. Cat	acagagcg	gcgtgtgacgcggggacgccgcgctcccaa	CGTCGccCC	GGttTGAc
B. Tau	acagagcg	gcgtgtgacgcggggacgccgcgctcccaa	CGTCGccCC	GGttTGAc
L. Afr	actgagcg	gcgtgtgacgcggggacgccgcgctcccaa	CGTCGccCC	GGttTGA
** ** *				

id=457626 gene=ENSG00000122482 name=ZNF644 segment=chr1.91487572.91487612.-1 type=EN

H.Sap	gTCGccCC	GGttTGACG	cacacggcacc	aaact	gtgagttt
R. Mac	gTCGccCC	GGttTGACG	cacacggcacc	aaact	gtgagttt
P. Abe	gTCGccCC	GGttTGACG	cacacggcact	-aact	gtgagttt
C. Jac	gTCGccCC	GGttTGACG	cacacggcacc	aaact	gtgagttt
M. Mus	gTCGccCC	GGttTGACG	cacacggcacc	aaact	gtgagttt
R. Nor	gTCGccCC	GGttTGACG	cacacggcacc	aaact	gtgagttt
C. Por	gTCGccCC	GGttTGACG	cacacggcacc	aaact	gtgagttt
O. Cun	gTCGccCC	GGttTGACG	cacacggcacc	aaact	gtgagttt
C. Fam	gTCGccCC	GGttTGACG	cacacggcacc	aaact	gtgagttt
F. Cat	gTCGccCC	GGttTGACG	cacacggcacc	aaact	gtgagttt
B. Tau	gTCGccCC	GGttTGACG	cacacggcacc	aaact	gtgagttt
L. Afr	gTCGccCC	GGttTGACG	cacacggcacc	aaact	gtgagttt

id=457627 gene=ENSG00000122482 name=ZNF644 segment=chr1.91487547.91487571.-1 type=EN VIEW

Figure 733:



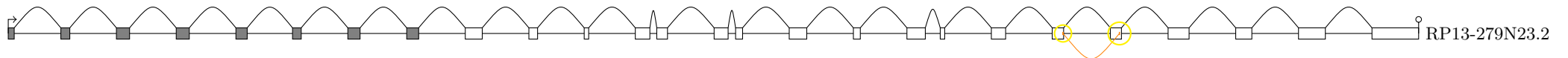
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R. Mac	aac	c	a	aaagcggtttCTCTTTGCAGCAAatATACattaaaaatagagtctctgta...173...gctggagcctgc	ttggagt
P. Tro	aac	c	a	aaagcggtttCTCTTTGCAGCAAatATACattaaaaatagagtctctgta...173...gctggagtctgc	ttggagt
P. Abe	aac	c	a	aaagcggtttCTCTTTGCAGCAAatATACattaaaaatagagtctctgta...173...gctggagtctgc	ttggagt
C. Jac	aac	c	a	aaagcggtttCTCTTTGCAGCAAatATACattaaaaatagagtctctgta...173...gctggagcctgc	ttggagt
M. Mus	aac	c	a	aaagcggtttCTCTTTGCAGCAAatATACattaaaaatagagtctctgta...166...gctggagcctgc	ttggagt
R. Nor	aac	c	a	aaagcggtttCTCTTTGCAGCAAatATACattaaaaatagagtctctgta...166...gctggagcctgc	ttggagt
C. Por	aac	c	a	aaagcggTTTGTTTTGCAGCAAatATACattaaaaatagagtctctgta...174...gctggagcctgc	ttggagt
C. Fam	aac	c	a	aaagcggtttCTCTTTGCAGCAAatATACattaaaaatagagtctctgta...173...gctggagcctgc	ttggagt
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S. Sus	aac	c	a	aaagcggtttCTCTTTGCAGCAAatATACattaaaaatagagtctctgta...174...gctggagcctgc	ttggagt
L. Afr	aac	c	a	aaagcggtttCTCTTTGCAGCAAatATACattaaaaatagagtctctgta...173...gttggagcctgc	ttggagt
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Figure 734:



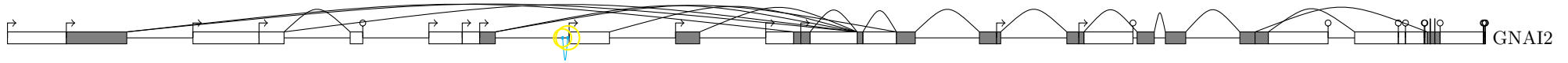
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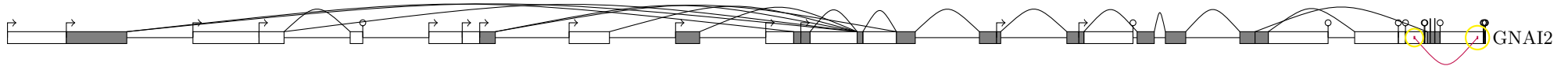
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Figure 736: CS=15.36



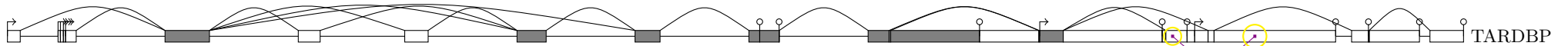
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S. Sus	tgccctga	gtgtgtctgcgt	...238...	ccttcagcgttgaacacttc	-----	CTTGCTTTTTTC	acatgtttatggaattgttcac	ctggttgaataataaaaatgt	agaaagaa
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Figure 737:



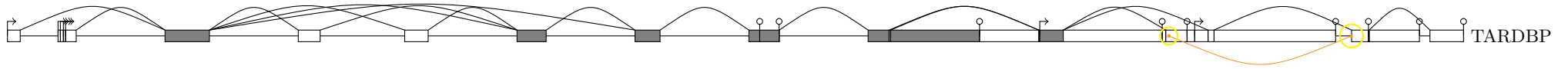
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R. Mac	ttttgcag	ccctgaatgcaaagaattcataGCAGTTAATTCCcC-TTTTTTGA	cccttttgagatggaacttt-----	..44..	attgaaaagtt	gtctcaag
P. Tro	ttttgcag	ccctgaatgcaaagaattcataGCAGTTAATTCCcC-TTTTTTGA	cccttttgagatggaacttt-----	..44..	attgaaaagtt	gtctcaag
P. Abe	ttttgcag	ccctgaatgcaaagaattcataGCAGTTAATTCCcC-TTTTTTGA	cccttttgagatggaacttt-----	..44..	attgaaaagtt	gtctcaag
C. Jac	ttttgcag	ccctgaatgcaaagaattcataGCAGTTAATTCCcC-TTTT	TTGAcccttttgagatggaacttt-----	..44..	attgaaaagtt	gtctcaag
M. Mus	ttttgcag	ccctgaatgcaaagaattcataGCAGTTAATTCCcC--TTTTTGA	cccttttgagatggaacttt-----	..44..	attgaaaagtt	gtctcaag
R. Nor	ttttgcag	ccctgaatgcaaagaattcataGCAGTTAATTCCcC--TTTTTGA	cccttttgagatggaacttt-----	..44..	attgaaaagtt	gtctcaag
C. Por	ttttgcag	ccctgaatgcaaagaattcataGCAGTTAATTCCcCCTTTTT	-tgacccttttgagatggaac-----	..47..	attgaaaagtt	gtctcaag
O. Cun	ttttgcag	ccctgaatgcaaagaattcataGCAGTTAATTCCcC-TTTTTTGACCC	TTTgagatggaactttgata---	..40..	attgaaaagtt	gtctcaag
C. Fam	ttttgcag	ccctgaatgcaaagaattcataGCAGTTAATTCCcC-TTTTTTGA	cccttttgagatggaacttt-----	..44..	attgaaaagtt	gtctcaag
B. Tau	ttttgcag	ccctgaatgcaaagaattcataGCAGTTAATTCCcCCTTTTT	TTGACCCTTTgagatggaactttcataaagt...	..36..	attgaaaagtt	gtctcaag
E. Cab	ttttgcag	ccctgaatgcaaagaattcataGCAGTTAATTCCcCCTTTTT	TTGAcccttttgagatggaacttt-----	..44..	attgaaaagtt	gtctcaag
L. Afr	ttttgcag	ctctgaatgcaaagaattcataGCAGTTAATTCCcCCTTTTT	ttggcccttttgagatggaa-----	..48..	attgaaaagtt	gtttcaag
		*****	* *****	*** ** *****	*****	** *****

id=508657 gene=ENSG00000120948 name=TARDBP segment=chr1_11084121_11084240.1 type=AN

H. Sap	ctaaaatg	gtaagcagtacc...178...	-----gcaccttcctagtttgggatTTGAAAAGtGGAATTAATTGC	agtagggataaaagtagaaga...	421...	agtttcctctgt	aaagggat
R. Mac	ctaaaatg	gtaagcagtacc...175...	-----gtaccttcctagtttgagatTTGAAAAGtGGAATTAATTGC	aatagggataaaagtagaaga...	421...	ggttcctctgt	aaagggat
P. Tro	ctaaaatg	gtaagcagtacc...178...	-----gcacgttcctagtttgggatTTGAAAAGtGGAATTAATTGC	agtagggataaaagtagaaga...	426...	agtttcctctgt	aaagggat
P. Abe	ctaaaatg	gtaagcagtacc...178...	-----gcaccttcctagtttgggatTTGAAAAGtGGAATTAATTGC	agtagggataaaagtagaaga...	426...	agtttcctctgt	aaagggat
C. Jac	ctaaaatg	gtaagcagtacc...176...	-----gcaccttcctagtttgggatTTGAAAAGtGGAATTAATTGC	aatagggataaaagtagaaga...	396...	ggttcctctgt	aaagggat
M. Mus	ctaaaatg	gtaagcagttac...160...	-----agcactttct-gtttgggatTTGAAAAGtGGAATTAATTGC	aatagggatgaagtagaaga...	408...	agtatcctctgt	aaaaggat
R. Nor	ctaaaatg	gtaagcagttac...161...	-----agcactttct-gtttgggatTTGAAAAGtGGAATTAATTGC	aatagggatgaagtagaaga...	407...	agtatcctctgt	aaaaggat
C. Por	gtaaaaatg	gtaagcagtacc...180...	-----gtatctttctg--ctgggatctGAAAAGtGGAATTAATTGC	aatagggataaaagtagaaga...	424...	agtttctctgt	aaaaggat
O. Cun	acctcatg	gtaagcagtgcc...162...	-----atctcagcgcccttctagttGGGGatTTGAAAAGtGGAATTAATTGC	aatagggataaaaggagaaga...	397...	agtttctctgt	aaaagggt
C. Fam	ctaaaatg	gtaagcagtacc...185...	-----gcacctttcgagtttgggatTTGAAAAGtGGAATTAATTGC	agtagggataaaagtagaaga...	427...	agtttctctgt	aaaaggat
B. Tau	ctaaaatg	gtaagcagtacc...168...	aggaatatcagcactttcTGGAtGGGGatTTGAAAAGtGGAATTAATTGC	aatagggataaaagtagaaga...	416...	agtttctctgt	aaaggatc
E. Cab	ctaaaatg	gtaagcagtacc...181...	-----gcacctttctagtttgggatTTGAAAAGtGGAATTAATTGC	aatagggataaaagtagaaga...	425...	agtttctctgt	aaagggat
L. Afr	ctacaatg	gtaagcagtacc...173...	-----acttttctggtttgggatTTGAAAAGtGGAATTAATTGC	catagggataaaagtagaaga...	427...	aatttctctgt	aaaaggat
		**	***** *	** *	*** *****	***** ** *****	* * * * *

id=508661 gene=ENSG00000120948 name=TARDBP segment=chr1_11084393_11085076.1 type=AN VIEW

Figure 738: CS=6.24



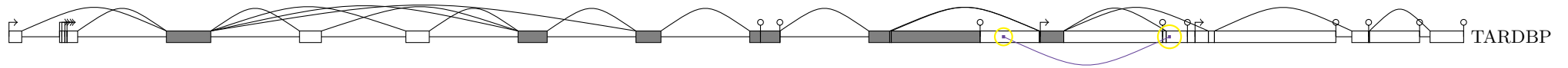
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R. Mac	ttttgcag	ccCTGAATGCAAAgaATTCA	tagcagttaattcccctttt...68...atttgaagtt	gtctcaag
P. Tro	ttttgcag	ccCTGAATGCAAAgaATTCA	tagcagttaattcccctttt...68...atttgaagtt	gtctcaag
P. Abe	ttttgcag	ccCTGAATGCAAAgaATTCA	tagcagttaattcccctttt...68...atttgaagtt	gtctcaag
C. Jac	ttttgcag	ccCTGAATGCAAAgaATTCA	tagcagttaattcccctttt...68...atttgaagtt	gtctcaag
M. Mus	ttttGCAG	ccCTGAATGCAAAgaATTCA	tagcagttaattcccctttt...67...atttgaagtt	gtctcaag
R. Nor	ttttgcag	ccCTGAATGCAAAgaATTCA	tagcagttaattcccctttt...67...atttgaagtt	gtctcaag
C. Por	ttttgcag	ccCTGAATGCAAAgaATTCA	tagcagttaattcccctttt...68...atttgaagtt	gtctcaag
O. Cun	ttttgcag	ccCTGAATGCAAAgaATTCA	tagcagttaattcccctttt...68...atttgaagtt	gtctcaag
C. Fam	ttttgcag	ccCTGAATGCAAAgaATTCA	tagcagttaattcccctttt...68...atttgaagtt	gtctcaag
B. Tau	ttttgcag	ccCTGAATGCAAAgaATTCA	tagcagttaattcccctttt...69...atttgaagtt	gtctcaag
E. Cab	ttttgcag	ccCTGAATGCAAAgaATTCA	tagcagttaattcccctttt...69...atttgaagtt	gtctcaag
L. Afr	ttttgcag	ctCTGAATGCAAAgaATTCA	tagcagttaattcccctttt...69...atttgaagtt	gtttcaag
	*****	* *****	*****	** ****

id=508657 gene=ENSG00000120948 name=TARDBP segment=chr1.11084121_11084240.1 type=AN

H. Sap	tcctctgt	aaaggatcttg-...41...-tttccaaccctgtaccatc	TGAATTTGCATtTTAG	---	cacttgca
R. Mac	tcctctgt	aaaggatcttg-...44...-tttccaaccctgtaccatc	TGAATTTGCATtTTAG	---	cacttgca
P. Tro	tcctctgt	aaaggatcttg-...41...-tttccaaccctgtaccatc	TGAATTTGCATtTTAG	---	cacttgca
P. Abe	tcctctgt	aaaggatcttg-...42...-tttccaaccctgtaccatc	TGAATTTGCATtTTAG	---	cacttgca
C. Jac	tcctctgt	aaaggatcttg-...44...-tttccaaccctgtaccatc	TGAATTTGCATtTTAG	---	cacttgca
M. Mus	tcctctgt	aaaaggatcgtg-...40...atttccaaccctgtg-catc	TGAATTTGCATtTTAG	caC TGT	tt---
R. Nor	tcctctgt	aaaaggatcgtg-...40...atttccaaccctgta-catc	TGAATTTGCATtTTAG	---	cacttgca
C. Por	tcctctgt	aaaaggatcttg-...45...-tttccaaccctgtaccatc	TGAATTTGCATtTTAG	---	cacttgca
O. Cun	tcctctgt	aaaaggatcttg-...40...-tttccaaccctgtaccatc	TGAATTTGCATtTTAG	---	catttgca
C. Fam	tcctctgt	aaaaggatcttg-...37...-tttccaaccctgtaccatc	TGAATTTGCATtTTAG	---	cacttgca
B. Tau	tcctctgt	aaa-ggatcttg-...38...-tttccaaccctgtaccatc	TGAATTTGCATtTTAG	---	cacttgca
E. Cab	tcctctgt	aaaggatcttg-...39...-tttccaaccctgtaccatc	TGAATTTGCATtTTAG	---	cacttgca
L. Afr	tcctgtat	aaaaggatcttg-...42...-tttccaaccctgtaccatc	TGAATTTGCATtTTAG	---	cacttgca
	* * * *	*** ** * **	*****	*****	**

id=508662 gene=ENSG00000120948 name=TARDBP segment=chr1.11085077_11085166.1 type=IN VIEW

Figure 739:



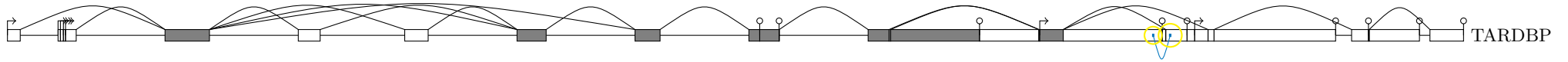
H. Sap	catgaaag	gttgaatattg...	82...	-----	ttatccctggactgtcaa	GTGAATCTTTGC	atGTTCA	aaacggaaccattgattag...	168...	taatctctgcag	ttcatctc
R. Mac	catgaaag	gttgaatattg...	82...	-----	ttatccctggactgtcaa	GTGAATCTTTGC	atGTTCA	aaatggaaccattgattag...	168...	taatctctgcag	ttcatctc
P. Tro	catgaaag	gttgaatattg...	82...	-----	ttatccctggactgtcaa	GTGAATCTTTGC	atGTTCA	aaacggaaccattgattag...	168...	taatctctgcag	ttcatctc
P. Abe	catgaaag	gttgaatattg...	82...	-----	ttatccctggactgtcaa	GTGAATCTTTGC	atGTTCA	aaacggaaccattgattag...	167...	taatctctgcag	ttcatctc
C. Jac	catgaaag	gttgaatattg...	83...	-----	ttatccctggactgtcaa	GTGAATCTTTGC	atGTTCA	aatggaaccattgattaga...	168...	taatctctgcag	ttcatctc
M. Mus	tataaagg	gttgaatattg...	83...	-----	ttatccctggactgtcaa	GTGAATCTTTGC	atGTTCA	aatggaaccattgattaga...	168...	taatctctgcag	ttcatctc
R. Nor	tataaagg	gttgaatattg...	83...	-----	ttatccctggactgtcaa	GTGAATCTTTGC	atGTTCA	aatggaaccattgattaga...	168...	taatctctgcag	ttcatctc
R. Nor	tataaagg	gttgaatattg...	65...	tttctctgtaatatctatc-	ATTGgaATTGTTA	TGAATCTTTGC	atGTTCA	agttagaaccattggttaga...	166...	taatctctgcag	ttcatctc
C. Por	cataaagg	gttgaatattg...	75...	---cctgtaatat	ttatccctggactgtcaa	GTGAATCTTTGC	atGTTCA	aaatggaaccattgattag...	162...	taatctctgcag	ttcatctc
O. Cun	cataaagg	gttgaatattg...	83...	-----	ttatccctggactgtcaa	GTGAATCTTTGC	atGTTCA	aaatggaaccattgattag...	169...	taatctctgcag	ttcatctc
C. Fam	cataaagg	gttgaatattg...	84...	-----	ttatccctggactgtcaa	GTGAATCTTTGC	atGTTCA	aatggaaccattgattaga...	174...	taatctctgcag	ttcatctc
F. Cat	cataaagg	gttgaatattg...	97...	-----	ttatccctggactgtcaa	GTGAATCTTTGC	atGTTCA	aaatggaaccattgattag...	180...	taatctctgcag	ttcatctc
B. Tau	cataaagg	gttgaatattg...	81...	-----	ttatccctggactgtcaa	GTGAATCTTTGC	atGTTCA	aaatggaaccattgattag...	174...	taatctctgcag	ttcatctc
E. Cab	cataaagg	gttgaatattg...	81...	-----	ttatccctggactgtcaa	GTGAATCTTTGC	atGTTCA	aaatggaaccattgattag...	169...	taatctctgcag	ttcatctc
L. Afr	cttaaagg	gttgaatattg...	82...	-----	ttatccctggactgtcaa	GTGAATCTTTGC	atGTTCA	aaatggaaccattgattag...	169...	taatctctgcag	ttcatctc
		* ** *	*** ** ** *		**** * *	*****	*	* ** ** ** *	***** **	***** **	*****

id=508652 gene=ENSG0000120948 name=TARDBP segment=chr1.11082916.11083249.1 type=AN

H. Sap	ttttgcag	cccTGAATGCAAAGAATTCAT	agcagttaattcccctttt	-----	...67...	atttgaaggtt	gtctcaag
R. Mac	ttttgcag	cccTGAATGCAAAGAATTCAT	agcagttaattcccctttt	-----	...67...	atttgaaggtt	gtctcaag
P. Tro	ttttgcag	cccTGAATGCAAAGAATTCAT	agcagttaattcccctttt	-----	...67...	atttgaaggtt	gtctcaag
P. Abe	ttttgcag	cccTGAATGCAAAGAATTCAT	agcagttaattcccctttt	-----	...67...	atttgaaggtt	gtctcaag
C. Jac	ttttgcag	cccTGAATGCAAAGAATTCAT	agcagttaattcccctttt	-----	...67...	atttgaaggtt	gtctcaag
M. Mus	ttttgcag	cccTGAATGCAAAGAATTCAT	agcagttaattcccctttt	-----	...67...	atttgaaggtt	gtctcaag
R. Nor	ttttgcag	cccTGAATGCAAAGAATTCAT	agcagttaattcccctttt	-----	...67...	atttgaaggtt	gtctcaag
R. Nor	ttttgcag	cccCTGAATGCAAAGAATTCAT	AGCAGTTAAT	-tccccttttgacccttttg...	56...	atttgaaggtt	gtctcaag
C. Por	ttttgcag	cccTGAATGCAAAGAATTCAT	agcagttaattcccctttt	-----	...60...	atttgaaggtt	gtctcaag
O. Cun	ttttgcag	cccTGAATGCAAAGAATTCAT	agcagttaattcccctttt	-----	...67...	atttgaaggtt	gtctcaag
C. Fam	ttttgcag	cccTGAATGCAAAGAATTCAT	agcagttaattcccctttt	-----	...67...	atttgaaggtt	gtctcaag
F. Cat	ttttgcag	cccTGAATGCAAAGAATTCAT	agcagttaattcccctttt	-----	...67...	atttgaaggtt	gtctcaag
B. Tau	ttttgcag	cccTGAATGCAAAGAATTCAT	agcagttaattcccctttt	-----	...68...	atttgaaggtt	gtctcaag
E. Cab	ttttgcag	cccTGAATGCAAAGAATTCAT	agcagttaattcccctttt	-----	...68...	atttgaaggtt	gtctcaag
L. Afr	ttttgcag	ctcTGAATGCAAAGAATTCAT	agcagttaattcccctttt	-----	...68...	atttgaaggtt	gtttcaag
		*****	* *****		*** ** *	*****	** *****

id=508657 gene=ENSG0000120948 name=TARDBP segment=chr1.11084121.11084240.1 type=AN VIEW

Figure 740:



H.Sap	ctttgacg	gtgggtgtccca...617...tgctgcagttctgtgctcctg	TGCTTGGATgCTTT	-ttataagagttgtcattgttggaaattcttaataaaaactgatttaaataa	tatgtgtc
R.Mac	ctttgacg	gtgggtgtccca...616...tgctgcagttctgtgctcctg	TGCTTGGATgCTTT	-ttataagagttgtcattgttggaaattcttaataaaaactgatttaaataa	tatgtgtc
P.Tro	ctttgacg	gtgggtgtccca...617...tgctgcagttctgtgctcctg	TGCTTGGATgCTTT	-ttataagagttgtcattgttggaaattcttaataaaaactgatttaaataa	tatgtgtc
P.Abe	ctttgacg	gtgggtgtccca...617...tgctgcagttctgtgctcctg	TGCTTGGATgCTTT	-ttataagagttgtcattgttggaaattcttaataaaaactgatttaaataa	tatgtgtc
C.Jac	ctttgacg	gtgggtgtccca...616...tgctgcagttctgtgctcctg	TGCTTGGATgCTTT	-ttataagagttgtcaatgttggaaattcttaataaaaactgatttaaataa	tatgtgtc
M.Mus	ctttgacg	gtgggtgtccca...603...tgctgcagttctgtgctcctg	TGCTTGGATgCTTT	-ttataagagttgtcattgttggaaattcttaataaaaactgatttaaataa	tatgtgtc
R.Nor	ctttgacg	gtgggtgtccca...609...tgctgcagttctgtgctcctg	TGCTTGGATgCTTT	-ttataagagttgtcattgttggaaattcttaataaaaactgatttaaataa	tatgtgtc
C.Por	ctttgacg	gtgggtgtccca...605...tgctgcagttctgtgctcctg	TGCTTGGATgCTTT	-tataagagttgtcaatgttggaaattcttaataaaaactgatttaaataa	tatgtgtc
O.Cun	ctctgacg	gtgggtgtccca...608...tgctgcagttctgtgctcctg	TGCTTGGATgCTTT	-ttatacagagttgtcaatgttggaaattcttaataaaaactgatttaaataa	tatgtgtc
C.Fam	ctttgacg	gtgggtgtccca...614...tgaggcagttctgtgctcctg	TGCTTGGATgCTTT	-ttataagagttgtcaatgttggaaattcttaataaaaactgatttaaataa	tatgtgtc
F.Cat	ctttgacg	gtgggtgtccca...616...tgatgcagttctgtgctcctg	TGCTTGGATgCTTT	-ttataagagttgtcaatgttggaaattcttaataaaaactgatttaaataa	tatgtgtc
B.Tau	ctttgacg	gtgggtgtccca...617...tgctgcagttctgtgctcctg	TGCTTGGATgCTTT	-ttataagagttgtcaatgttggaaattcttaataaaaactgatttaaataa	tatgtgtc
E.Cab	ctttgacg	gtgggtgtccca...616...tgctgcagttctgtgctcctg	TGCTTGGATgCTTT	-ttataagagttgtcaatgttggaaattcttaataaaaactgatttaaataa	tatgtgtc
L.Afr	ctttgacg	gtgggtgtccca...618...tgctgcagttctgtgctcctg	TGCTTGGATgCTTT	-ttataagagttgtcaatgttggaaattcttaataaaaactgatttaaataa	tatgtgtc
	** *****	***** **	** * *****	*** *****	*****

id=508655 gene=ENSG00000120948 name=TARDBP segment=chr1.11083387_11084100.1 type=AN

H.Sap	ttttgcag	ccctgaatgcAAAGaATTCAAGCA	gttaattccccttttttgac...63...attgaaaagtt	gtctcaag
R.Mac	ttttgcag	ccctgaatgcAAAGaATTCAAGCA	gttaattccccttttttgac...63...attgaaaagtt	gtctcaag
P.Tro	ttttgcag	ccctgaatgcAAAGaATTCAAGCA	gttaattccccttttttgac...63...attgaaaagtt	gtctcaag
P.Abe	ttttgcag	ccctgaatgcAAAGaATTCAAGCA	gttaattccccttttttgac...63...attgaaaagtt	gtctcaag
C.Jac	ttttgcag	ccctgaatgcAAAGaATTCAAGCA	gttaattccccttttttgac...63...attgaaaagtt	gtctcaag
M.Mus	ttttgcag	ccctgaatgcAAAGaATTCAAGCA	gttaattccccttttttgacc...62...attgaaaagtt	gtctcaag
R.Nor	ttttgcag	ccctgaatgcAAAGaATTCAAGCA	gttaattcccctttttgacc...62...attgaaaagtt	gtctcaag
C.Por	ttttgcag	ccctgaatgcAAAGaATTCAAGCA	gttaattccccttttttgac...63...attgaaaagtt	gtctcaag
O.Cun	ttttgcag	ccctgaatgcAAAGaATTCAAGCA	gttaattccccttttttgac...63...attgaaaagtt	gtctcaag
C.Fam	ttttgcag	ccctgaatgcAAAGaATTCAAGCA	gttaattccccttttttgac...63...attgaaaagtt	gtctcaag
F.Cat	ttttgcag	ccctgaatgcAAAGaATTCAAGCA	gttaattccccttttttgac...63...attgaaaagtt	gtctcaag
B.Tau	ttttgcag	ccctgaatgcAAAGaATTCAAGCA	gttaattccccttttttga...64...attgaaaagtt	gtctcaag
E.Cab	ttttgcag	ccctgaatgcAAAGaATTCAAGCA	gttaattccccttttttga...64...attgaaaagtt	gtctcaag
L.Afr	ttttgcag	ctctgaatgcAAAGaATTCAAGCA	gttaattccccttttttgg...64...attgaaaagtt	gtttcaag
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id=508657 gene=ENSG00000120948 name=TARDBP segment=chr1.11084121_11084240.1 type=AN VIEW

Figure 741:



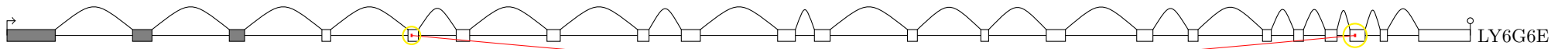
H. Sap	aggagagg	agaaaaaaaaag...2198...ggcatgatgatagcatatgt	GTTCaGGTTT	TAGCTG	ttgtgtttaaaaattgaaaa...335...gaactgaaccct	aaatcttg
R. Mac	aggagagg	agaaaaataaa...2206...ggcatgatgatagcatatgt	GTTCaGGTTT	TAGCTG	ttgtgtttaaaaattgaaaa...334...gaactgaaccct	aaatcttg
P. Tro	aggagagg	agaaaaaaaaag...2192...ggcatgatgatagcatatgt	GTTCaGGTTT	TAGCTG	ttgtgtttaaaaattgaaaa...335...gaactgaaccct	aaatcttg
P. Abe	aggagagg	agaaaaaaaaag...2185...ggcatgatgatagcatatgt	GTTCaGGTTT	TAGCTG	ttgtgtttaaaaattgaaaa...336...gaactgaaccct	aaatcttg
C. Jac	cggagagg	agaaaaaagaa...2203...ggcatgatgatagcatatgt	GTTCaGGTTT	TAGCTG	ttgtgtttaaagattgaaaa...334...gaactgaaccct	aaatcttg
M. Mus	aggagagg	agagagggaaaa...2246...ggcatggtgatagcatatgt	GTTCaGGTTT	TAGCTG	ttgtgtttaaagattgaaaa...405...gaactgaaccct	aaatcttg
R. Nor	aggagagg	agagaggaagac...2201...ggcatggtgatagcatatgt	GTTCaGGTTT	TAGCTG	ttgtgtttaaagattgaaaa...398...gaactgaaccct	aaatcttg
C. Por	aaaagaaa	agaaagaaaaaa...2147...ggcatgatgatagcctatgt	GTTCaGGTTT	TAGCTG	ttgtgtttaaagattgaaaa...351...gaactgaaccct	aaatcttg
O. Cun	agagaaag	agagagagagag...2323...ggcatgatgatagcatatgt	GTTCaGGTTT	TAGCTG	ttgtgtttaaagattgaaaa...350...gaactgaaccct	aaatcttg
C. Fam	gggcgagg	aggaggaaggag...2485...ggcatgatgatagcatatgt	GTTCaGGTTT	TAGCTG	ttgtgtttaaagattgaaaa...343...gaactgaaccct	aaatcttg
E. Cab	aagagagg	aaaaacaaaaaa...2258...ggcatgacgatagcatatgt	GTTCaGGTTT	TAGCTG	ttgtgtttaaagattgaaaa...336...gaactgaaccct	aaatcttg
S. Sus	cagagagg	aaaaagaaaaaa...2268...ggcatgatgatagcatatgt	GTTCaGGTTT	TAGCTG	ttgtgtttaaagattgaaaa...343...gaactgaaccct	aaatcttg
L. Afr	gagagagg	agaacaaaaagt...2216...ggcatgatgatagcatatgt	GTTCaGGTTT	TAGCTG	ttgtgtttaaagattgaaaa...339...gaactgaaccct	aaatcttg
	*	*	*****	*****	*****	*****

id=43562 gene=ENSG00000124766 name=SOX4 segment=chr6_21596234_21598847_1 type=E3

H. Sap	aggagagg	agaaaaaaaaag...2564...ttttgagaaggaataaaat	CAGCTGGA	ACTGAAC	cct	aaatcttg
R. Mac	aggagagg	agaaaaataaa...2571...ttttgagaaggaataaaat	CAGCTGGA	ACTGAAC	cct	aaatcttg
P. Tro	aggagagg	agaaaaaaaaag...2558...ttttgagaaggaataaaat	CAGCTGGA	ACTGAAC	cct	aaatcttg
P. Abe	aggagagg	agaaaaaaaaag...2552...ttttgagaaggaataaaat	CAGCTGGA	ACTGAAC	cct	aaatcttg
C. Jac	cggagagg	agaaaaaagaa...2568...ttttgagaaggaataaaat	CAGCTGGA	ACTGAAC	cct	aaatcttg
M. Mus	aggagagg	agagagggaaaa...2682...ttttgagaaggaataaaat	CAGCTGGA	ACTGAAC	cct	aaatcttg
R. Nor	aggagagg	agagaggaagac...2630...ttttgagaaggaataaaat	CAGCTGGA	ACTGAAC	cct	aaatcttg
C. Por	aaaagaaa	agaaagaaaaaa...2529...ttttgagaaggaataaaat	CAGCTGGA	ACTGAAC	cct	aaatcttg
O. Cun	agagaaag	agagagagagag...2704...ttttgagaaggaataaaat	CAGCTGGA	ACTGAAC	cct	aaatcttg
C. Fam	gggcgagg	aggaggaaggag...2859...ttttgagaaggaataaaat	CAGCTGGA	ACTGAAC	cct	aaatcttg
E. Cab	aagagagg	aaaaacaaaaaa...2625...ttttgagaaggaataaaat	CAGCTGGA	ACTGAAC	cct	aaatcttg
S. Sus	cagagagg	aaaaagaaaaaa...2642...ttttgagaaggaataaaat	CAGCTGGA	ACTGAAC	cct	aaatcttg
L. Afr	gagagagg	agaacaaaaagt...2586...ttttgagaaggaataaaat	CAGCTGGA	ACTGAAC	cct	aaatcttg
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Figure 742:



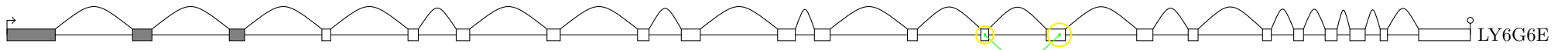
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R. Mac	tgctGCAG	GCtTCAGta	TTCTgg	TCCATCTCTTATT	actcctctcccttcgccttcttctacttgtacaggaag	gtcagtg
P. Tro	tgctGCAG	GCtTCAGta	TTCTgg	TCCATCTCTTATT	actcctctcccttcgccttcttctacttgtacaggaag	gtcagtg
P. Abe	tgctGCAG	GCtTCAGtt	TTCTgg	TCCATCTCTTATT	actcctctcccttcgccttcttctacttgtacaggaag	gtcagtg
C. Jac	tgctGCAG	GCtTCAGta	TTCTgg	TCCATCTCTTATT	actcctctcccttcgccttcttctacttgtacaggaag	gtcagtg
M. Mus	tgctgcag	gctTCAGtc	TTCTgg	TCCATCTCTTATT	attactcctctcccttcgccttcttctacttatacaggaag	gtcagtg
R. Nor	tgctgcag	gctTCAGtc	TTCTgg	TCCATCTCTTATT	attactcctctcccttcgccttcttctacttatacaggaag	gtcagtg
C. Por	tgctgcag	gctTCAGtc	TTCTgg	TCCATCTCTTATT	attactcctctcccttcgccttcttctacttatacaggaag	gtcagtg
O. Cun	tgctgcag	gctTCAGtc	TTCTgg	TCCATCTCTTATT	attactcctctcccttcgccttcttctacttatacaggaag	gtcagtg
C. Fam	tgctGCAG	GCtTCAGtc	TTCTgg	TCCATCTCTTATT	attactcctctcccttcgccttcttctacttatacaggaag	gtcagtg
B. Tau	tgctGCAG	GCtTCAGtc	TTCTgg	TCCATCTCTTATT	attactcctctcccttcgccttcttctacttatacaggaag	gtcagtg
E. Cab	tgctGCAG	GCtTCAGtc	TTCTgg	TCCATCTCTTATT	attactcctctcccttcgccttcttctacttatacaggaag	gtcagtg
L. Afr	tGATGCAG	GCtTCAGtc	TTCTgg	TCCATCTCTTATT	attactcctctcccttcgccttcttctacttatacaggaag	gtcagtg
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R. Mac	ctgaccag	cctcaatttatagcc	GATGGGAGGTGGA	agAGGACTGGT	GTCTGT	ctgtcctcgcctcctaccaggcagaacacgggcccgacttcccctggagcgtgg	gtaaggag
P. Tro	ctgaccag	cctcaatttatagcc	GATGGGAGGTGGA	agAGGACTGGT	GTCTGT	ctgtcctcgcctcctaccaggcagaacacgggcccgacttcccctggagcgtgg	gtaaggag
P. Abe	ctgaccag	cctcaatttatagcc	GATGGGAGGTGGA	agAGGACTGGT	GTCTGT	ctgtcctcgcctcctaccaggcagaacacgggcccgacttcccctggagcgtgg	gtaaggag
C. Jac	ctaatacag	cctcaatttatagcc	GATGGGAGGTGGA	agAGGACTGGT	GTCTGT	ccgtcctcgcctcctaccaggcagaacacgggcccgacttcccctggagcgtgg	gtaaggag
M. Mus	cccatacag	cctcaatttatagtcgc	TGGGAGGTGGAT	gAGGACTGGT	gtgtgtcgtgtcctcgcctcctaccaggcagagcatgggcccctgatttcccctggagtgagg	gtaaggat	
R. Nor	cccatacag	cctcaatttatagtcgc	TGGGAGGTGGAT	gAGGACTGGT	gtgtgtcgtgtcctcgcctcctaccaggcagagcatgggcccctgatttcccctggagtgagg	gtaaggac	
C. Por	cctcgcag	cctcaatttatagcc	GATGGGAGGTGGA	agAGGACTGGT	gtgtgtcgtgtcctcgcctcctaccaggcagagcatgggcccgacttcccctggagtgagg	gtaaggag	
O. Cun	ctgaccag	cctcaatttatagcc	GATGGGAGGTGGA	agAGGACTGGT	gtgtgtcgtgtcctcgcctcctaccaggcagaacacgggcccgacttcccctggagcgtgg	gtaaggag	
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B. Tau	atgaccag	cctcgatttatagcc	GATGGGAGGTGGA	agAGGACTGGT	GCCTGT	ccgtcctcgcctcctaccaggcagaacacgggcccctgatttcccctggagcgtgg	gtaaggag
E. Cab	ctgaccag	cttcaatttatagcc	GATGGGA	agGTGGA	agAGGACTGGT	GTCTGT	ctgtcctcgcctcctaccaggcagaacacgggcccgacttcccctggagtgagg
L. Afr	ctgaccag	cctcgatttatagcc	GATGGGAGGTGGA	agAGGACTGGT	GTCTGT	ctcgcctcctaccaggcagaacacgggcccgacttcccctggagtgagg	gtaaggag
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Figure 743: CS=3.9



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R. Mac	tgttacag	ctggatattca	GTCCTGGGCTGGAA	atcatccaggctttgctggaagcacg	gtgagacc
P. Tro	tgttacag	ctggatattca	GTCCTGGGCTGGAA	atcatccaggctttgctggaagcacg	gtgagacc
P. Abe	tgttacag	ctggatattca	GTCCTGGGCTGGAA	atcatccaggctttgctggaagcacg	gtgagacc
C. Jac	tgttacag	ctggatattca	GTCCTGGGCTGGAA	atcatccaggctttgctggaagcacg	gtgagacc
M. Mus	tgttacag	ctggctattc	TGTCCTGGGCTGGAA	atcatccaggctttgcaggaagcacg	gtgagacc
R. Nor	tgttgcag	ctggatattc	TGTCCTGGGCTGGAA	atcatccaggctttgctgggagcacg	gtgagacc
C. Por	tgtgacag	ctggctactca	GTCCTGGGCTGGAA	ccatccaggcttcgaggaagcacg	gtgagacc
O. Cun	cattacag	ctggctattca	GTCCTGGGCTGGAA	atcatccaggctttgctggaagcacg	gtgagacc
C. Fam	tgttgacag	ctggatattca	GTCCTGGGCTGGAA	ccatccaggctttgctggaagcacg	gtgagacc
F. Cat	tgttgcag	ctggatattc	TGTCCTGGGCTGGAA	atcatccaggctttgctggaagcacg	gtgagaca
E. Cab	tgttccag	ctggatattca	GTCCTGGGCTGGAA	atcatccaggctttgctggaagcacg	gtgagacc
L. Afr	tgttatag	ctggatattca	GTCCTGGGCTGGAA	ccatccaggctttgctggaagcacg	gtgagacc

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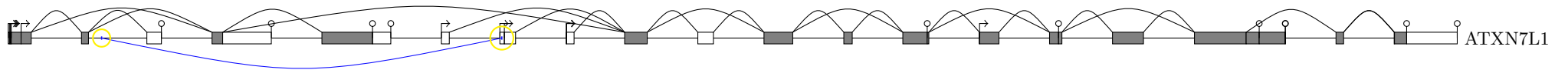
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R. Mac	tcctgtag	ggagtgccttc...40...ttgccatccaccgcctgggc	TTCCAGCCC	AGGAC	atcatcatctacgcctggtccatcggcggcttca	gtaccagc
P. Tro	tcctgcag	ggggtgccattc...40...ttgccatccaccgcctgggc	TTCCAGCCC	AGGAC	atcatcatctacgcctggtccatcggcggcttca	gtaccagc
P. Abe	tcctgcag	ggggtgccattc...40...ttgccatccaccgcctgggc	TTCCAGCCC	AGGAC	atcatcatctacgcctggtccatcggcggcttca	gtaccagc
C. Jac	tcctgcag	ggggtgccattc...40...ttgccatccaccgcctgggc	TTCCAGCCC	AGGAC	atcatcatctacgcctggtccatcggcggcttca	gtaccagc
M. Mus	ccctgcag	ggggtaccattc...40...ttgccatccaccgcctgggc	TTCCAGCCC	AGGAC	atcatcatctacgcctggtccatcggcggcttca	gtaccagc
R. Nor	tcctgcag	ggggtaccattc...40...ttgccatccaccgcctgggc	TTCCAGCCC	AGGACA	ttgtcatctacgcctggtccatcggcggcttca	gtaccagc
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O. Cun	ccctgcag	ggggtgccattc...40...ttgccatccaccgcctgggc	TTCCAGCCC	AGGAC	atcatcgtctacgcctggtccatcggcggcttca	gtaccagc
C. Fam	tcctgcag	ggggtgccattt...40...ttgccatctaccgcctgggc	TTCCAGCCC	AGGAC	atcatcatctacgcctggtccatcggcggcttca	gtaccagc
F. Cat	tcctgcag	ggggtgccattt...40...ttgccatccaccgcctgggc	TTCCAGCCC	AGGACA	atcatcatctacgcctggtccatcggcggcttca	gtaccagc
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L. Afr	tcctgcag	ggggtgcccttc...40...ttgccatccaccgcctaggc	TTCCAGCCC	AGGAC	atcatcatctacgcctggtccatcggcggcttca	gtaccagc

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Figure 744:



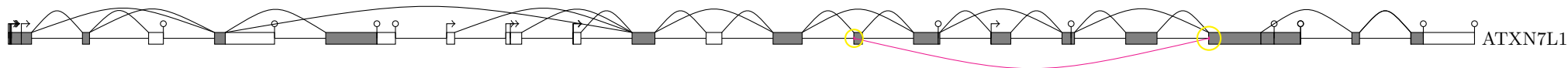
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C. Fam	taaagaag	gtaagtggagct...84...actaaggcttgtcaaaaatt	GAGCACGCCAGGTGA	ctactgcttca-tgttaactt---...427...ctgttcccag	catggaaa	
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L. Afr	taaagaag	gtaagtggagct...84...actaaggcttgtcaaaaatt	GAGCACGCCAGGTGA	ctactgcttca-tgttaactt---...408...ctgtttcccag	ctgcaaa	

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P. Tro	ttccctaa	tcT--CGTCTGGGCGTGCTC	tcttaaaggggaagtgggtgcgttctg	actggcca
P. Abe	ttccctaa	tcT--CGTCTGGGCGTGCTC	tcttaaaggggaagtgggtgcgttctg	actggcca
C. Jac	ttccctaa	tcT--CATCTGGGCGTGCTC	tcttaaaggggaagtgggtgcgttctg	actggcca
M. Mus	ttcctcaa	tcT--CATCTGGGCGTGCTC	tcttaaaggggaagtgaagcattctc	actggccg
R. Nor	ttcctcaa	tcT--CATCTGGGCGTGCTC	tcttaaaggggaagtgaagcattctc	actggccg
C. Por	ttccc--T	GGTTGCa-CTGGGCGTGCTC	ccttaaaggggaagtgggtgcattctg	actggccg
O. Cun	ttccctaa	tcT--CATCTGGGCGTGCTC	tcttaaaggggaagtgggtgcgttctg	actggcca
C. Fam	ttccctaa	--TCGCaTCTGGGCGTGCTC	tcttaaaggggaagtgggtgcgttctg	actggcca
B. Tau	ttccctaa	--TCGCaTCTGGGCGTGCTC	tcttaaaggggaagtgcgttctg	actggccg
E. Cab	ttccctaa	--TCGCaTCTGGGCGTGCTC	tcttaaaggggaagtgggtgcgttctg	actggcca
S. Sus	ttccctaa	--TCGCaTCTGGGCGTGCTC	tcttaaaggggaagtgggtgcgttctg	actggcca
O. Avi	ttccctaa	--TCGCaTCTGGGCGTGCTC	tcttaaaggggaagtgcgttctg	actggcca
L. Afr	ttccctaa	tcT--CATCTGGGCGTGCTC	tcttaaaggggaagtgggtgcgttctg	actggcca

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Figure 745: CS=7.2



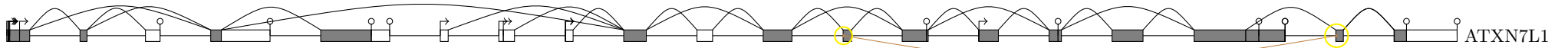
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P.Abe	actttcag	gtatgtgtcagt...3202...	-tttcttatatTTTTgTTT	TTCCTAAACcaG	AGAGAGaa
C.Jac	actttcag	gtatgtgtcagt...3506...	-tttcttatatTTTTgTTT	TTCCTAAACcaG	AGAGAGaa
M.Mus	actttcag	gtatgtgttcct...2649...	tttcttaca-tTTTTgTTT	TTCCTAAACcaG	AGAGAGaa
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S.Sus	actttcag	gtacgtgtctgt...4944...	-tttcttatatTTTTgTTT	TTCCTAAACcaG	AGAGAGaa
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L.Afr	actttcag	gtacgtgtccat...3410...	-cttcttatatTTTTgTTT	TTCCTAAACcaG	AGAGAGaa
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P.Tro	tcagccag	gtcagcatctgg...2909...	tctcactgattctctttcac	TCTTcTCTcatGTTTAG	GAAGatcc
P.Abe	tcagccag	gtcagcatctgg...2918...	tctcactgattctctttcac	TCTTcTCTcatGTTTAG	GAAGatcc
C.Jac	tcagccag	gtcagcatctgg...2563...	tctcactgactgtctttcac	TCTTcTCTcgtGTTTAG	GAAGatcc
M.Mus	tcagccag	gtcagcatctgg...2232...	tctcactgtttctctctggc	TCTTcTCTcgtGTTTAG	GAAGatcc
R.Nor	tcagccag	gtcagcatctgg...2272...	tctcactgtttctctctggc	TCTTcTCTcgtGTTTAG	GAAGatcc
O.Cun	tcagccag	gtcagcatctgg...2307...	tctcactgtttctctctgac	TCTTcTCTcgtGTTTAG	GAAGatcc
C.Fam	gcagccag	gtcagcatctgg...2381...	tctcacggtttctctctcac	TCTTcTCTcatGTTTAG	GAAGatcc
F.Cat	tcagccag	gtcagcatctgg...2437...	tctcacggtttctctctcac	TCTTcTCTcatGTTTAG	GAAGatcc
B.Tau	tcagccag	gtcagcatctgg...2406...	tctcactgtttctctttcac	TCTTcTCTcacGTTTAG	GAAGatcc
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O.Avi	tcagccag	gtcagcatctgg...2399...	tctcactgtttctctttcac	TCTTcTCTcacGTTTAG	GAAGatcc
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Figure 746: CS=16.52



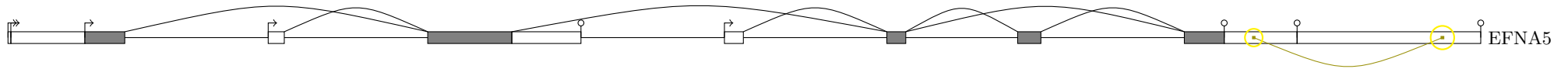
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M. Mus	actttcag	gtatgtgttcct...2650...	-ttcttaca-tTTTTgTTgt	TTCT	aAACCaG	AGAGA	gaa
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P. Tro	gttgct	aa	gaggtttgatct...2831...	-tgagtg-gggcttcaatggtg	TCTTTCaG	GTTGGGAa
P. Abe	gttgct	aa	gaaatttgatct...2841...	-tgagtg-ggacttcaatggtg	TCTTTCaG	GTTGGGAa
C. Jac	gttgct	aa	gaagcttgatct...3577...	--gagtggggcttcaatggtg	TCTTTCaG	GTTGGGAa
M. Mus	gttgct	aa	gcagtttgatct...2667...	-ctgaatg-ggggttc-ctggtg	TCTTTCaG	GTTGGGAa
C. Por	gtcaca	ga	gaagtttgatct...2155...	-ctgagca-ggcttcaatggtg	TCTTTCaG	GTTGGGAa
O. Cun	ggtgct	ga	gctggtgactt...2725...	-tgagca-aggcttcaatggtg	TCTTTCaG	GTTGGGAa
B. Tau	gttgcc	aa	gcagtttgatct...2301...	-tgagga-aggcttcaatggtg	TCTTTCaG	GTTGGGAa
E. Cab	gttgcc	ga	gaagtttatcc...2416...	-tgaatc-aggcttcaatggtg	TCTTTCaG	GTTGGGAa
S. Sus	attgcc	aa	gcatttttatct...2684...	-tgagca-gggcttcaatggtg	TCTTTCaG	GTTGGGAa
O. Avi	gttgcc	aa	gcagtatgatct...2319...	-tgagga-aggcttcaatggtg	TCTTTCaG	GTTGGGAa
L. Afr	gttgct	aa	aaagttttaaac...2633...	-tgagta-gggcttcaatggtg	TCTTTCaG	GTTGGGAa
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id=375897 gene=ENSG00000146776 name=ATXN7L1 segment=chr7_105251051_105253920_-1 type=IN VIEW

Figure 747: CS=23.66



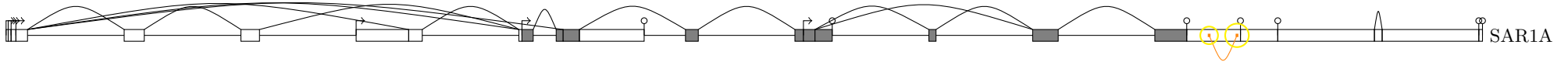
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R.Mac	ctcccgtc	acttgtcacaga...57...cttgttattgg--gtt--ttggca	GATGTCAGATTTT	--tgttttctttctttcagcct---...114...tccagatgaaaa	tgccaaat
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C.Por	ctctcgtc	acctgtcacaga...57...cttgttattgg--gtt--ttggca	GATGTCAGATTTT	--tggtttctttcttttggcct---...116...tccagatgaaaa	tgccaaat
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C.Fam	ccgctgcc	acctgagcagca...97...tttttttt---tttttttgggca	GATGTCAGATTTT	--tggtttctttctttcagcct---...104...tccagatgaaaa	tgccaaat
B.Tau	ctctcgtc	gcctgtcacaga...62...----tattgggtttttcttttggca	GATGTCAGATTTT	--tggtttgtttgttttcttt---...151...tccagacgaaca	tgccagat
E.Cab	ctcccgtc	acctgtcacaga...59...--tgttattggttttt---ttggca	GATGTCAGATTTT	----tttctttctttcagcctgaa...116...tccagatgaaaa	tgccaaat
L.Afr	ctcccgtc	acctgtcacaga...57...cttgttattgg--ttt--ttggca	GATGTCAGATTTT	--tggtttctttctttcagcct---...116...tccagtgaaaa	tgccaaat
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R.Mac	gatgaaaa	tgccaaattgct...3897...tactca-tcgagtgcgtgttt	GAAATgCTGACATT	atataaacgtaaaagaaaat...114...attttaattgga-	tcctcct
P.Tro	gatgaaaa	tgccaaattgct...3905...-acttactcgagtgcgtgttt	GAAATgCTGACATT	atataaacgtaaaagaaaat...103...attttaattgga-	tcctcct
P.Abe	gatgaaaa	tgccaaattgct...3883...tactca-tcgagtgcgtgttt	GAAATgCTGACATT	atataaacgtaaaagaaaat...103...attttaattgga-	tcctcct
C.Jac	gatgaaaa	tgccaaattgct...4103...tactca-tcgagtgcgtgttt	GAAATgCTGACATT	atataaacgtaaaagaaaat...104...attttaattgga-	tcctcct
M.Mus	gataaaaa	tgccagattgct...3920...tcctca-tcgagtgcgtgttt	GAAATgCTGACATT	atataaacgtaaaagaaaat...108...attttaattgga-	tcctcct
R.Nor	gataaaaa	tgccagattgct...4013...ctctca-tcgagtgcgtgttt	GAAATgCTGACATT	atataaacgtaaaagaaaat...104...attttaattgga-	gacctct
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O.Cun	ggcgaaaa	tgccaaattgct...3910...tcctca-tccagtgcgtgttt	GAAATgCTGACATT	atataaacgtaaaagaaaat...105...attttaattgga-	gacctcct
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L.Afr	ggtgaaaa	tgccaaattgct...3827...tactca-tcgagtgcgtgttt	GAAATgCTGACATT	atataaacgtaaaagaaaat...104...attttaattgga-	tcctcct
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Figure 748:



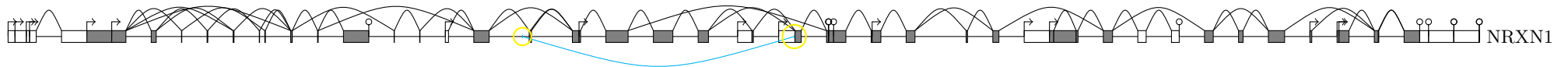
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P. Abe	ctgatacct	attcacagcttc...63...--gagtctctgtcaactctctc	ATTGcc	CAGTGGTGA	ATGTG	ctcttctccacactgttggg-----	...130...gttcaaaagaaa	gtgattct
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O. Cun	ctgatacct	attcacagcttc...63...--gagtctctgtcagctcccat	CGCC	CAGTGGTGA	ATGTG	ctcttctccgcaactgtcggg-----	...107...tttcgagcgaaa	gtgattct
F. Cat	ctgataccc	attcccagcttc...63...--gagtctctgtccgctctctc	ATCGcc	CAGTGGTGA	ATGTG	TTTCT--ccacactattgggaggtgac...123...tttcaaaagaaa	gtgattct	
B. Tau	ctgatacct	attcacagcttc...63...--gagtctctgtcgtctctctc	ATTGcc	CAGTGGTGA	ATGTG	ctcttctccacactgttggg-----	...130...tttcaaaagaaa	gtgattct
E. Cab	ctgatacct	attcacagcttc...61...aagagtctctgtcagctctc	ATCGcc	CAGTGGTGA	ATGTG	ctcttctccacactgttggg-----	...131...tttcaaaagaaa	gtgattct
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O. Avi	ctgatacct	attcacagcttc...63...--gaggctctctcgtctctctc	ATCAcc	CAGTGGTGA	ATGTG	ctcttctccacactgttggg-----	...130...tttcaaaagaaa	gtgattct
L. Afr	ctgatacct	attcacagcttc...61...aggag--tctgtcagctctctc	ATCGcc	CAGTGGTGA	ATGTG	ctcttctccacactgtcggg-----	...131...tttcaaaagaaa	gtgattct
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P. Tro	ctgatacct	attcacagcttc...213...-----ggggcacctgaaaagaaaa	CACGTc	TCACCACTGTGGT	tgatt-caaaagaaa	gtgattct
P. Abe	ctgatacct	attcacagcttc...213...-----ggggcacctgaaaagaaaa	CACGTc	TCACCACTGTGGT	tggtt-caaaagaaa	gtgattct
C. Jac	ctgatacct	attcacagcttc...213...-----ggggcacctgaaaagaaaa	CACGTc	TCACCACTGTGGT	tgatttcaaaagaaa	gtattctt
C. Por	ctgatacct	attcacagcttc...208...-----gggacacctgagaagaaaa	CACGTc	TCACCACTGTGGT	tgatttcaaaagaaa	gtgattct
O. Cun	ctgatacct	attcacagcttc...187...-----ggggcacctgaaaagaaaa	CACGTc	TCACCACTGTGGT	catttcgagcgaaa	gtgattct
F. Cat	ctgataccc	attcccagcttc...204...gccatcatggggcacctgaa	AGAAAaa	CACGTc	TCACCACTGTGGT	tgatttcaaaagaaa
B. Tau	ctgatacct	attcacagcttc...212...-----ggggcacctgaaaagaaaa	CACGTc	TCACCACTGTGGT	tgatttcaaaagaaa	gtgattct
E. Cab	ctgatacct	attcacagcttc...211...-----ggggcacctgaaaagaaaa	CACGTc	TCACCACTGTGGT	tgatttcaaaagaaa	gtgattct
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O. Avi	ctgatacct	attcacagcttc...212...-----ggggcacctgaaaagaaaa	CACGTc	TCACCACTGTGGT	tgatttcaaaagaaa	gtgattct
L. Afr	ctgatacct	attcacagcttc...211...-----ggggcacctgaaaagaaaa	CACGTc	TCACCACTGTGGT	tgatttcaaaagaaa	gtgattct
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Figure 749:



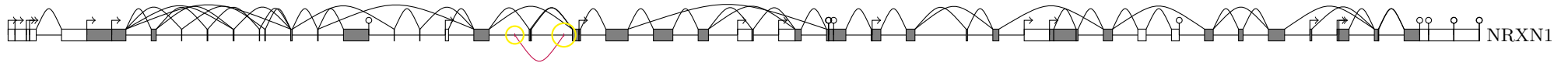
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R. Mac	tgcgtag	gtaacagcgag...1882...	tactaacatgcttaataact	AACATGTCATTc	ATGGAatgtttcatttactaaccg-----	...100...	ttctccaaaag	cactcagg
P. Tro	tgcgtag	gtaacagcgag...1864...	tactaacatgcttaataact	AACATGTCATTc	ATGGAATGTTT	catttactaaccgttacct...94...	ttctccaaaag	cactcagg
P. Abe	tgcgtag	gtaacagcgag...1879...	tactaacatgcttaataact	AACATGTCATTc	ATGGAATGTTT	catttactaaccgttacct...94...	ttctccaaaag	cactcagg
C. Jac	tgcgtag	gtaacagcgag...1894...	tactaacatgcttaataact	AACATGTCATTc	ATGGAATGTTT	catttactaaccgttacct...94...	ttctccaaaag	cactcagg
M. Mus	tgcgtag	gtaacaacgcag...1870...	tactaacatgcttaataact	AACATGTCATTc	ATGGAatgtttcatttactaacc-----	...104...	ttctccaaaag	cactcagg
R. Nor	tgcgtag	gtaacaacgcag...1932...	tactaacatgcttaataact	AACATGTCATTc	ATGGAatgtttcatttactaaccg-----	...104...	ttctccaaaag	cactcagg
C. Por	tgcgtag	gtaacagcgag...1869...	tactaacatgcttaataact	AACATGTCATTc	ATGGAATGTTT	catttactaaccgttacct...94...	ttctccaaaag	cactcagg
D. Cun	tgcgtag	gtaacagcgag...1918...	tactaacatgcttaataact	AACATGTCATTc	ATGGAATGTTT	catttactaaccgttacct...94...	ttctccaaaag	cactcagg
C. Fam	tgcgtag	gtaacagcgag...1995...	tactaacatgcttaataact	AACATGTCATTc	ATGGAATGTTT	catttactaaccgttacct...94...	ttctccaaaag	cactcagg
B. Tau	tgcgtag	gtaacagcgag...1918...	tactaacatgcttaataact	AACATGTCATTc	ATGGAATGTTT	catttactaaccgttacct...94...	ttctccaaaag	cactcagg
E. Cab	tgcgtag	gtaacagcgag...1912...	tactaacatgcttaataact	AACATGTCATTc	ATGGAATGTTT	catttactaaccattacct...94...	ttctccaaaag	cactcagg
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L. Afr	tgcgtag	gtaacagcgag...1893...	tactaacatgcttaataact	AACATGTCATTc	ATGGAATGTTT	catttactaaccgttacct...94...	ttctccaaaag	cactcagg
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P. Tro	tgctgtat	tgactgtgccta...257...	tcatttgcttgactgattct	GAGTGTCCATAATGACTGTT	tgcatattctacag	gcaaaggt
P. Abe	tgctatat	tgactgtgccta...259...	tcatttgcttgactgattct	GAGTGTCCATAATGACTGTT	tgcatattctacag	gcaaaggt
C. Jac	tgctatat	tgactgtgccta...251...	tcatttaattgactgattct	GAGTGTCCATAATGACTGTT	tgcatattctacag	gcaaaggt
M. Mus	tgctatat	tgactgtgccta...399...	-----tcttgatgattctgattgc	CCATAATGACTGTT	tgcatattctacag	gcaaaggt
R. Nor	tcctatat	tgattgtgcca...322...	-----gtcttgctgattctgattg	TCCATAATGACTGTT	tgcatattctacag	gcaaaggt
C. Por	agcaatat	tgactgtgccta...240...	tcggttgcttgactgattcc	GAGTGTCCATAATGACTGTT	tgcatattctacag	gcaaaggt
O. Cun	tgctatgt	tgactgtgcca...257...	tcggttgcttgattgattct	GAACATCCATAATGACTGTT	tgcatggt-tacag	gcaaaggt
C. Fam	tgctatat	tgactgtgccta...258...	tcatttgctgactgattct	GAGTGTCCATAATGACTGTT	tgcatattctacag	gcaaaggt
B. Tau	tgctctgt	tgactgtgccta...255...	tcatttgctgactgattct	GAGTGTCCATAATGACTGTT	tgcatattctacag	gcaaaggt
E. Cab	agctatat	tgactgtgccta...260...	tcatttgcttgactgattct	GAGTGTCCATAATGACTGTT	tgcatattctacag	gcaaaggt
S. Sus	ggctgtat	tgactgtgccta...261...	tcatttgcttgactgattct	GAGTGTCCATAATGACTGTT	tgcatattctacag	gcaaaggt
O. Avi	tgctgtgt	tgactgtgccta...262...	tcatttgcttgactgattct	GAGTGTCCATAATGACTGTT	tgcatattctacag	gcaaaggt
L. Afr	tgctttat	tgactgtgccta...246...	tcatttgcttgactgattct	GAGTGTCCATAATGACTGTT	tgcatattctacag	gcaaaggt
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Figure 750:



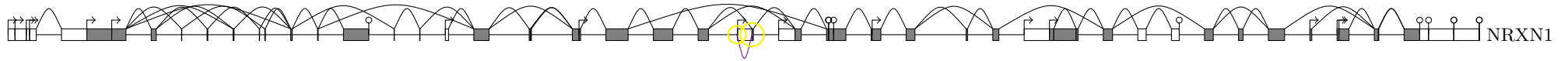
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M.Mus	tgcgctcag	gtaacaacg	cag...1835...	-ttttctgtgaaaat	ttttttt-----	GCCCTTTTT	CtATGTT	actaacatgctta	aacta-----	139...	ttctccaca	aaag	cactcagg
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B.Tau	tgcgctcag	gtaacagcg	cag...1883...	-ttttctgtgaaaat	ttttttt-----	GCCCTTTTT	CtATGTT	actaacatgctta	aacta-----	136...	ttctccaca	aaag	cactcagg
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S.Sus	tgcgctcag	gtaacagcg	cag...1868...	-ttttctgtgaaaat	ttttttt-----	GCCCTTTTT	CtATGTT	actaacatgctta	aacta-----	136...	ttctccaca	aaag	cactcagg
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P.Tro	attgttcg	gtagatatc	att...806...	agaatctaagaata	aacctcAAACAGACATG	aaAATGgg	TTCCg	tcataggtctaaa	aaaaaaa...	134...	ttgttatctag	gtgacaat
P.Abe	attgttcg	gtagatatc	att...807...	agaatctaagaata	aacctcAAACAGACATG	aaAATGgg	TTCCg	tcataggtctaaa	aaaaaaa...	127...	ttgttatctag	gtgacaat
C.Jac	attgttcg	gtagatatc	att...800...	agattctaagaata	aacctcAAACAGACATG	aaAATGgg	TTCCg	tcataggtctaaa	aaaaaaa...	124...	ttgttatctag	gtgacaat
M.Mus	attgttcg	gtagatatc	att...856...	----ccaagaata	aacctcAAACAGACATG	aaAATGgg	TTCCg	tcataggtctaaa	aaaaaaa...	126...	ttgttatctag	gtgacaat
R.Nor	attgttcg	gtagatatc	att...797...	----ccaagaata	aacctcAAACAGACATG	aaAATGgg	TTCCg	tcataggtctaaa	aaaaaaa...	108...	ttgttatctag	gtgacaat
C.Por	attgttcg	gtagatatc	att...783...	agaatccaagaata	aacctcAAACAGACATG	aaAATGgg	TTCCg	tcataggtctaaa	aaaaaaa...	145...	ttgttatctag	gtgacaat
O.Cun	attgttcg	gtagatatc	att...793...	agaatccaagaata	aacctcAAACAGACATG	aaAATGgg	TTCCg	tcataggtctaaa	aaaaaaa...	137...	ttgttatctag	gtgacaat
C.Fam	attgttcg	gtagatatc	att...819...	----ccaagaata	aacctcAAACAGACATG	aaAATGgg	TTCCg	tcataggtctaaa	aaaaaaa...	148...	ttgttatctag	gtgacaat
B.Tau	attgttcg	gtagatatc	att...789...	----ccaagaata	aacctcAAACAGACATG	aaAATGgg	TTCCg	tcataggtctaaa	aaaaaaa...	115...	ttgttatctag	gtgacaat
E.Cab	attgttcg	gtagatatc	att...796...	----ccaagaata	aacctcAAACAGACATG	aaAATGgg	TTCCg	tcataggtctaaa	aaaaaaa...	129...	ttgttatctag	gtgacaat
S.Sus	attgttcg	gtagatatc	att...798...	----ccaagcata	aacctcAAACAGACATG	aaAATGgg	TTCCg	tcataggtctaaa	aaaaaaa...	130...	ttgttatctag	gtgacaat
O.Avi	attgttcg	gtagatatc	att...794...	----ccaagaata	aacctcAAACAGACATG	aaAATGgg	TTCCg	tcataggtctaaa	aaaaaaa...	123...	ttgttatctag	gtgacaat
L.Afr	attgttcg	gtagatatc	att...796...	----ccaagaata	aacctcAAACAGACATG	aaAATGgg	TTCCg	tcataggtctaaa	aaaaaaa...	138...	ttgttatctag	gtgacaat
	*****	*****	*****	*	*	*	*	*	*	*	*	*****

id=628500 gene=ENSG00000179915 name=NRXN1 segment=chr2.50847322.50848342.-1 type=IN VIEW

Figure 751:



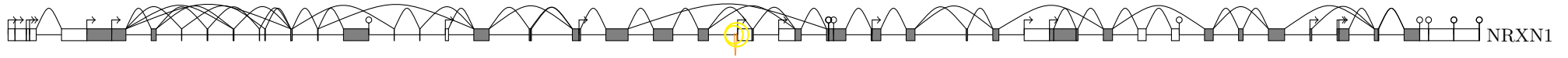
H.Sap	caatctag	gtaacaacctgc...	2232...	-acaatgatatgttctttcac	AGATGGGGAGAA	agttgcagccagtct	aagccaaa
R.Mac	caatctag	gtaacaacctgc...	2232...	-acagtgatatgttctttcac	AGATGGGGAGAA	agttgcagccagtct	aagccaaa
P.Tro	caatctag	gtaacaacctgc...	2235...	-aacaatgatatgttctttcac	TAGATGGGGAGAA	agttgcagccagtct	aagccaaa
P.Abe	caatctag	gtaacaacctgc...	2234...	-acaatgatatgttctttcac	AGATGGGGAGAA	agttgcagccagtct	aagccaaa
C.Jac	caatctag	gtaacaacctgc...	2261...	-ataatgatatgttctttcac	AGATGGGGAGAA	agttgcagccagtct	aagccaaa
M.Mus	caatctag	gtaa-aacaggcc...	2187...	-ataacagctctgttctttcac	AGATGGGGAGAA	GTAGcaaccagtct	aagccaag
R.Nor	caatctag	gtaacaacatgc...	2117...	-atactagtctgttctttcac	AGATGGGGAGAA	TGATGcaaccgtct	aagccaag
O.Cun	caatctag	gtaacaactgcc...	2237...	-acaatgacatgttctttcac	AGATGGGGAGAA	agttgcaccagtct	aagtcaag
C.Fam	caatctag	gtaacaactcgc...	2230...	-acaatgatatgttctttcac	AGATGGGGAGAA	agttgcagccagtct	aagccaaa
F.Cat	caatctag	gtaacaacttgc...	1699...	-acaagaatattgttctttcac	AGATGGGGAGAA	agttgcagccagtct	aagccaag
B.Tau	caactag	gtaacaactcgc...	2202...	-acaatgattgttctttcac	AGATGGGAAGAA	agctgcagccagtct	aagccaag
E.Cab	caatctag	gtaacaactcgc...	2213...	-acaatgatatgttctttcac	AGATGGGGAGAA	agttgcaaccagtct	aagccaag
S.Sus	caatctag	gtaacaactcgc...	2193...	-acattgattgttctttcac	AGATGGGGAGAA	agttgcagccagtct	aagccaag
L.Afr	caactag	gtaacgacctgc...	2220...	-acaacgatatgttctttcac	AGATGGGGAGAA	agttgcagccagtct	aagccaag
		*** **	**** ** *	* *	***** **	***** **	*** **

id=628509 gene=ENSG00000179915 name=NRXN1 segment=chr2_50756074_50758364_-1 type=IN

H.Sap	gccagtct	aagccaaacatc...	237...	-----gaattttcatttttcatcta	TTCT	CCCCATCT	ag	attgtatc
R.Mac	gccagtct	aagccaaacatc...	237...	-----gaattttcatttttcatcta	TTCT	CCCCATCT	ag	attgtatc
P.Tro	gccagtct	aagccaaacatc...	237...	-----gaattttcatttttcatcta	TTCT	CCCCATCT	ag	attgtatc
P.Abe	gccagtct	aagccaaacatc...	237...	-----gaattttcatttttcatcta	TTCT	CCCCATCT	ag	attgtatc
C.Jac	gccagtct	aagccaaacatc...	234...	-----gaattttcatttttcatcta	TTCT	CCCCATCT	ag	attgtatc
M.Mus	accagtct	aagccaagcatc...	232...	---gataaatattcattttcat	CTATTCTTC	CCATCT	ag	attgtatc
R.Nor	accgtct	aagccaagcatc...	229...	aaggataaatattcatttct	CATct	ATTCT	CCCCATCT	ag
O.Cun	cccagtct	aagtcaagcatc...	238...	-----aaattttcatttttcatcta	TTCT	CCCCATCT	ag	attgtatc
C.Fam	gccagtct	aagccaaacatc...	261...	-----aaattttcatttttcatcta	TTCT	CCCCATCT	ag	attgtatc
F.Cat	gccagtct	aagccaagcatc...	246...	-----aaattttcatttttcatcta	TTCT	CCCCATCT	ag	attgtatc
B.Tau	gccagtct	aagccaagcatc...	241...	-----aaattttcatttttcatcta	TTCTTC	CCATCT	ag	attgtatc
E.Cab	accagtct	aagccaagcatc...	238...	-----aaattttcatttttcatcta	TTCT	CCCCATCT	ag	attgtatc
S.Sus	gccagtct	aagccaagcatc...	241...	-----aaattttcatttttcatcta	TTCT	CCCCATCT	ag	attgtatc
L.Afr	gccagtct	aagccaagcatc...	242...	-----aaattttcatttttcatcta	TTCT	CCCCATCT	ag	attgtatc
		** **	*** **	*****	*****	*****	*****	*****

id=628510 gene=ENSG00000179915 name=NRXN1 segment=chr2_50755790_50756073_-1 type=AN VIEW

Figure 752: CS=4.2



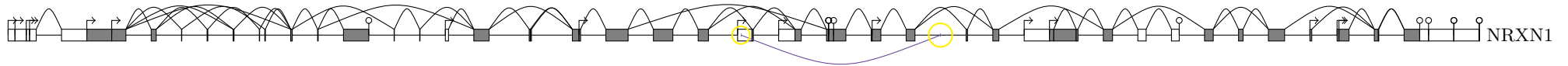
H. Sap	caatctag	gtaacaacctgc...	2175...	--ctagctgaacctgcactgta	CCCCATTGTGACGGAGCA	cttttacat	tttgcggaaaa	-----	..34..	..tgcagccagtct	aagccaaa	
R. Mac	caatctag	gtaacaacctgc...	2175...	--ctagctgaacctgcactgta	CCCCATTGTGACGGAGCA	cttttacat	tttgcggaaaa	-----	..34..	..tgcagccagtct	aagccaaa	
P. Abe	caatctag	gtaacaacctgc...	2177...	--ctagctgaacctgcaccgta	CCCCATTGTGACGGAGCA	cttttacat	tttgcggaaaa	-----	..34..	..tgcagccagtct	aagccaaa	
C. Jac	caatctag	gtaacaacctgc...	2204...	--ctagctgaacctgcactgta	CCCCATTGTGACGGAGCA	cttttacat	tttgcggaaaa	-----	..34..	..tgcagccagtct	aagccaaa	
M. Mus	caatctag	gtaa-aacaggcc...	2130...	--ctagctgagccttgcaactgta	CCCCATTGTGACGGAGCA	cttttaact	tttggggaaga	-----	..34..	..agcaaccagtct	aagccaag	
R. Nor	caatctag	gtaacaacatgc...	2060...	--ctagctgagccttgcaaccgta	CCCCATTGTGACGGAGCA	cttttaact	tttggggaaga	-----	..34..	..tgcaccggctct	aagccaag	
C. Por	caacctag	gtaaccacctgc...	2135...	--ctagctgagccttgcaactgta	CCCCATTGTGACGGAGCA	cttttaact	tttactaaaaa	-----	..34..	..tgcagccagtct	aagccaag	
D. Cun	caatctag	gtaacaactgc...	2180...	--ctagctgagccttgcaactgta	CCCCATTGTGACGGAGCA	cttttaact	tttgcggaaaa	-----	..34..	..tgcaccagtct	aagtcaag	
C. Fam	caatctag	gtaacaactgc...	2173...	--ctagctggccttgcaactgta	CCCCATTGTGACGGAGCA	cttttaact	tttgccaaaaa	-----	..34..	..cgagccagtct	aagccaaa	
F. Cat	caatctag	gtaacaactgc...	1642...	--ctagctgagccttgcaactgta	CCCCATTGTGACGGAGCA	TTTTT	aattatgctg	gaaaaa	caaga...	..28..	..tgcagccagtct	aagccaag
B. Tau	caacctag	gtaacaactgc...	2146...	--tagctgagccttgcaactgta	CCCCATTGTGACGGAGCA	cttttaact	taaatgtg	aaaa	-----	..34..	..tgcagccagtct	aagccaag
E. Cab	caatctag	gtaacaactgc...	2156...	--ctagctgagcttgcaactgta	CCCCATTGTGACGGAGCA	cttttaact	ttatgctg	aaaa	-----	..34..	..tgcaccagtct	aagccaag
S. Sus	caatctag	gtaacaactgc...	2136...	--ctagctgatccttgcaactgta	CCCCATTGTGACGGAGCA	cttttaact	tatattg	gaaa	-----	..34..	..tgcagccagtct	aagccaag
O. Avi	caacctag	gtaacagctcac...	2149...	gcctagctgagccttgcaactg	TTCCCCATTGTGACGGAGCA	cttttaact	taaatgtg	aaaa	-----	..34..	..tgcagccagtct	aagccaag
L. Afr	caacctag	gtaacgacctgc...	2163...	--ctagctgtgcttgcaactgta	CCCCATTGTGACGGAGCA	cttttaact	tatgtgg	aaaa	-----	..34..	..cgagccagtct	aagccaag
		*** **	**** * *	*****	***** *	*****	*****	**	*	*** ** **	*** **	

id=628509 gene=ENSG00000179915 name=NRXN1 segment=chr2_50756074_50758364_-1 type=IN

H. Sap	caatctag	gtaacaacctgc...	2221...	-----	ttttgcggaaaacaatgata	TGTTCT	TCACA	ATGGGG	gaaaagtgcagccagtct	aagccaaa
R. Mac	caatctag	gtaacaacctgc...	2221...	-----	ttttgcggaaaacagtgata	TGTTCT	TCACA	ATGGGG	gaaaagtgcagccagtct	aagccaaa
P. Abe	caatctag	gtaacaacctgc...	2223...	-----	ttttgcggaaaacaatgata	TGTTCT	TCACA	ATGGGG	gaaaagtgcagccagtct	aagccaaa
C. Jac	caatctag	gtaacaacctgc...	2250...	-----	ttttgctgaaaataatgata	TGTTCT	TCACA	ATGGGG	gaaaagtgcagccagtct	aagccaaa
M. Mus	caatctag	gtaa-aacaggcc...	2176...	-----	ttttggtgaagataaacgct	TGTTCT	TCACA	ATGGGG	gaaaagtgcagccagtct	aagccaag
R. Nor	caatctag	gtaacaacatgc...	2106...	-----	ttttggtgaagataactgct	TGTTCT	TCACA	ATGGGG	gaaaagtgcagccagtct	aagccaag
C. Por	caacctag	gtaaccacctgc...	2181...	-----	ttttactaaaaatgatgata	TGTTCT	TCACA	ATGGGG	gacagttgcagccagtct	aagccaag
D. Cun	caatctag	gtaacaactgc...	2226...	-----	ttttgctgaaaacaatgata	TGTTCT	TCACA	ATGGGG	gaaaagtgcagccagtct	aagccaaa
C. Fam	caatctag	gtaacaactgc...	2219...	-----	ttatgccaacaatgata	TGTTCT	TCACA	ATGGGG	gaaaagtgcagccagtct	aagccaaa
F. Cat	caatctag	gtaacaactgc...	1681...	tttttaattatgctg	aaaacAAGAA	taTGTTCT	TCACA	ATGGGG	gaaaagtgcagccagtct	aagccaag
B. Tau	caacctag	gtaacaactgc...	2191...	-----	ttaaattgtaacaatgatt	TGTTCT	TCACA	ATGGG	gaaaagtgcagccagtct	aagccaag
E. Cab	caatctag	gtaacaactgc...	2202...	-----	ttatgctgaaaacaatgata	TGTTCT	TCACA	ATGGGG	gaaaagtgcagccagtct	aagccaag
S. Sus	caatctag	gtaacaactgc...	2182...	-----	ttatattgaaaacattgatt	TGTTCT	TCACA	ATGGGG	gaaaagtgcagccagtct	aagccaag
O. Avi	caacctag	gtaacagctcac...	2197...	-----	ttaaattgaaaacattgatt	TGTTCT	TCACA	ATGGGG	Gaaaagtgcagccagtct	aagccaag
L. Afr	caacctag	gtaacgacctgc...	2209...	-----	ttatgtgaaaacaacgata	TGTTCT	TCACA	ATGGGG	gaaaagtgcagccagtct	aagccaag
		*** **	**** * *	**	*	*****	***	*	*** ** **	*** **

id=628509 gene=ENSG00000179915 name=NRXN1 segment=chr2_50756074_50758364_-1 type=IN VIEW

Figure 753: CS=9



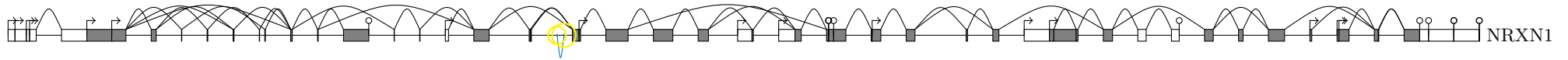
H.Sap	gccagtct	aagccaacatccttgacatttaacaattctttacttcacttagattgtcacc	ATGTAGCTTTGTTTGAAT	ttggcca--tttttaaacctt---.181..ttccccatctag	attgtatc
R.Mac	gccagtct	aagccaacatccttgacatttaacaactctttacttcacttagattgtcacc	ATGTAGCTTTGTTTGAATTGG	cca--tttttaaaccttctat...177..ttccccatctag	attgtatc
P.Tro	gccagtct	aagccaacatccttgacatttaacaattctttacttcacttagattgtcacc	ATGTAGCTTTGTTTGAAT	ttggcca--tttttaaacctt---.181..ttccccatctag	attgtatc
P.Abe	gccagtct	aagccaacatccttgacatttaacaattctttacttcacttagattgtcacc	ATGTAGCTTTGTTTGAAT	ttggcca--tttttaaacctt---.181..ttccccatctag	attgtatc
C.Jac	gccagtct	aagccaacatccttgacatttaacaactctttatttcacttagattgtcacc	ATGTAGCTTTGTTTGAAT	ttggcca--ttttgaaacctt---.178..ttccccatctag	attgtatc
C.Por	gccagtct	aagccaagcatccttgacagtttaactactcttta-ttcacttagattgtcacc	ATGTAGCTTTGTTTGAAGTGG	ccatttttttgaacattct---.188..ttccccatctag	attgtatc
O.Cun	cccagtct	aagtcaagcatccttgacagtttagcaactctttatgtcacttagattgtcacc	ATGTAGCTTTGTTTGAAT	ttggcca--ttttcttaacct---.182..ttccccatctag	attgtatc
C.Fam	gccagtct	aagccaacatccttgacagtttaacaactctttatttcacttagattgtcacc	ATGTAGCTTTGTTTGAATTGG	cca--ttaaaaaaaaaaagaaa...201..ttccccatctag	attgtatc
F.Cat	gccagtct	aagccaagcatccttgacagtttaacaactctttatttcacttagattgtcacc	ATGTAGCTTTGTTTGAAT	ttggcca--tttaaaaaaaaa---.190..ttccccatctag	attgtatc
B.Tau	gccagtct	aagccaagcatccttgacagtttaacaattctttatttcacttagattgtcacc	ATGTAGCTTTGTTTGAAT	ttggcca--tttttaaaaatt---.185..ttccccatctag	attgtatc
E.Cab	accagtct	aagccaagcatccttgacagtttaacaattctttatttcacttagattgtcacc	ATGTAGCTTTGTTTGAATTGG	ccattttctttaacctct---.178..ttccccatctag	attgtatc
S.Sus	gccagtct	aagccaagcatccttgacagtttaacaattctttatttcacttagattgtcacc	ATGTAGCTTTGTTTGAAT	ttggcca--tttaaaaaaaga---.185..ttccccatctag	attgtatc
L.Afr	gccagtct	aagccaagcatccttgacagtttaacaactctttatttcacttagattgtcacc	ATGTAGCTTTGTTTGAAT	ttggccatattttt-----tttaa...186..ttccccatctag	attgtatc
	*****	*** ** *	*****	*****	*****

id=628510 gene=ENSG00000179915 name=NRXN1 segment=chr2.50755790.50756073.-1 type=AN

H.Sap	atgtgaag	gtattagatctt...4944...-tattttgc-tttttttttat----	TTTGctGACAAAG	TTGCATtg
R.Mac	atgtgaag	gtattagatctt...4939...ttaatattttgctttttt--TTAAtTTTGctGACAAAG	TTGCATtg	
P.Tro	atgtgaag	gtattagatctt...4944...atattttgc--ttttttttat----	TTTGctGACAAAG	TTGCATtg
P.Abe	atgtgaag	gtattaaatctt...4944...atattttgc--ttttttttat----	TTTGctGACAAAG	TTGCATtg
C.Jac	atgtgaag	gtactagatctt...4944...atattttgc--ttttttttat----	TTTGctGACAAAG	TTGCATtg
C.Por	atgtgaag	gtactagatctt...3534...--aatatattttgcttttttt--TTATTTTGctGACAAAG	TTGCATtg	
O.Cun	atgtgaag	gtactagatctt...4944...-tattttgc-tttttttttat----	TTTGctGACAAAG	TTGCATtg
C.Fam	atgtgaag	gtactagatctt...4939...--aatatattttgctttttttTTAAtTTTGctGACAAAG	TTGCATtg	
F.Cat	atgtgaag	gtactagatctt...3549...--atattgctttttttttttat----	TTTGctGACAAAG	TTGCATtg
B.Tau	atgtgaag	gtattagatctt...4944...ttgcttt--ttttttttttat----	TTTGctGACAAAG	TTGCATtg
E.Cab	atgtgaag	gtactagatctt...4821...atattttgctttttttttt--TTAAtTTTGctGACAAAG	TTGCATtg	
S.Sus	atgtgaag	gtacaagacctt...4944...atattttgc--ttttttttat----	TTTGctGACAAAG	TTGCATtg
L.Afr	atgcaag	gtactggatctt...4944...ttgcttt--ttttttttttat----	TTTGctGACAAAG	TTGCATtg
	*** ** *	***	*	*****

id=628525 gene=ENSG00000179915 name=NRXN1 segment=chr2.50693626.50699435.-1 type=IN VIEW

Figure 754: CS=3.9



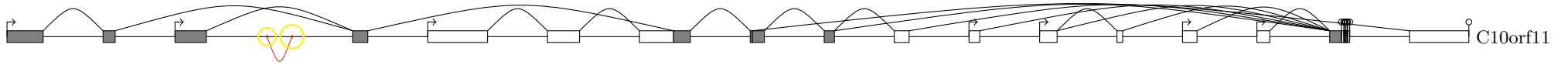
H. Sap	attgttcg	gtagatatcatt...673...	taggaagcattttactaaca	CCATTTTGTGTCTG	ctcaataacttttgagttgc...269...	tttgttatctag	gtgacaat
R. Mac	attgttcg	gtagatatcatt...678...	taggaagcattttactaaca	CCATTTTGTGTCTG	ctcaataacttttgagttgc...265...	tttgttatctag	gtgacaat
P. Tro	attgttcg	gtagatatcatt...674...	taggaagcattttactaaca	CCATTTTGTGTCTG	ctcaataacttttgagttgc...274...	tttgttatctag	gtgacaat
P. Abe	attgttcg	gtagatatcatt...675...	taggaagcattttactaaca	CCATTTTGTGTCTG	ctcaataacttttgagttgc...267...	tttgttatctag	gtgacaat
C. Jac	attgttcg	gtagatatcatt...668...	taggaagcattttactaaca	CCATTTTGTGTCTG	ctcaataacttttgagttgc...264...	tttgttatctag	gtgacaat
M. Mus	attgttcg	gtagatatcatt...718...	taggaggcattttactaaca	CCATTTTGTGTCTG	ctaaataacttttgagttgc...264...	tttgatcctag	gtgacaat
R. Nor	attgttcg	gtagatatcatt...659...	taggaggcattttactaaca	CCATTTTGTGTCTG	ctaaataacttttgagttgc...246...	tttgttatctag	gtgacaat
C. Por	attgttcg	gtagatatcatt...655...	taggaagcattttactaaca	CCATTTTGTGTCTG	ctaaataacttttaagttgc...275...	tttgttatctag	gtgacaat
O. Cun	attgttcg	gtagatatcatt...661...	taggaagcattttactaaca	CCATTTTGTGTCTG	ctaaataacttttgagttgc...277...	tttgttatctag	gtgacaat
C. Fam	attgttcg	gtagatatcatt...682...	taggaagcattttactaaca	CCATTTTGTGTCTG	ctaaataacttttgagttgc...285...	tttgttatctag	gtgacaat
F. Cat	attgttcg	gtagatatcatt...680...	taggaagcattttactaaca	CCATTTTGTGTCTG	ctaaataacttttgagttgc...271...	tttgttatctag	gtgacaat
B. Tau	attgttcg	gtagatatcatt...652...	taggaagcattttactaaca	CCATTTTGTGTCTG	ctaaataacttttgagttgc...252...	tttgttatctag	gtgacaat
E. Cab	attgttcg	gtagatatcatt...659...	taggaagcattttactaaca	CCATTTTGTGTCTG	ctaaataacttttgagttgc...266...	tttgttatctag	gtgacaat
S. Sus	attgttcg	gtagatatcatt...661...	taggaagcattttactaaca	CCATTTTGTGTCTG	ctaaataacttttgagttgc...267...	tttgttatctag	gtgacaat
O. Avi	attgttcg	gtagatatcatt...657...	taggaagcattttactaaca	CCATTTTGTGTCTG	ctaaataacttttgagttgc...260...	tttgttatctag	gtgacaat
L. Afr	attgttcg	gtagatatcatt...661...	taggaggcattttactaaca	CCATTTTGTGTCTG	ctaaataacttttgagttgc...273...	tttgttatctag	gtgacaat
	*****	*****	*****	*****	*****	*****	*****

id=628500 gene=ENSG00000179915 name=NRXN1 segment=chr2.50847322.50848342.-1 type=IN

H. Sap	attgttcg	gtagatatcatt...808...	atctaagaataaacctcaaa	CAGACATGAAAATGG	gttcctcataggtctaaaa...134...	tttgttatctag	gtgacaat
R. Mac	attgttcg	gtagatatcatt...813...	atctaagaataaacctcaaa	CAGACATGAAAATGG	gttcctcataggtctaaaa...130...	tttgttatctag	gtgacaat
P. Tro	attgttcg	gtagatatcatt...809...	atctaagaataaacctcaaa	CAGACATGAAAATGG	gttcctcataggtctaaaa...139...	tttgttatctag	gtgacaat
P. Abe	attgttcg	gtagatatcatt...810...	atctaagaataaacctcaaa	CAGACATGAAAATGG	gttcctcataggtctaaaa...132...	tttgttatctag	gtgacaat
C. Jac	attgttcg	gtagatatcatt...803...	ttctaagaataaacctcaaa	CAGACATGAAAATGG	gttcctcataggtctaaaa...129...	tttgttatctag	gtgacaat
M. Mus	attgttcg	gtagatatcatt...854...	atccaagaataaacctcaaa	CAGACATGAAAATGG	gttcgccacagggtctaaaa...128...	tttgatcctag	gtgacaat
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Figure 755:



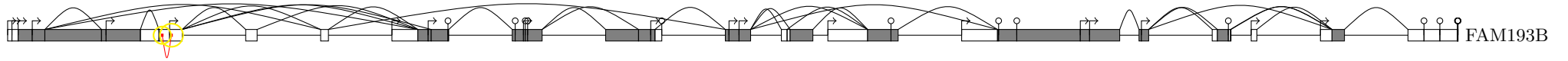
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Figure 756:



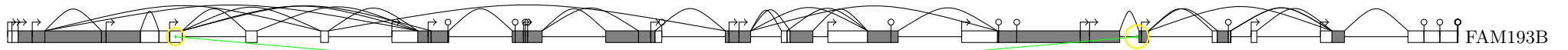
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Figure 757:



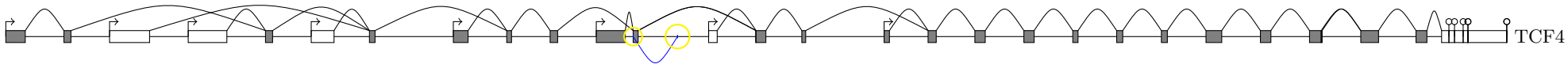
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M. Mus	ctccttgg	gtgagtgcacca...63...--ccccagaggcctggccatgg	GCACTgAGCCcTCCTGG	ctgtgtcttcctag	acgatgtg
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Figure 758: CS=4.2



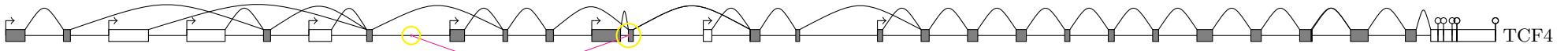
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O.Avi	tacttttc	gtatgtaaacat...60...-----acaatttacatttttttggtGTTGTCGTTTCTCTTgGCAGG	Gtaaaaaca
L.Afr	tactttgc	gtatgtaaacat...52...aaacaccatttatactttt-----TTGTCGTTTCTCTTgGCAGG	Gtaaaaaca

id=218445 gene=ENSG00000196628 name=TCF4 segment=chr18_53070750_53070851_-1 type=IN

H.Sap	gccaccag	gtaagtgagaat...1313...gcagtttgtttgaaagaatTCTGCAGGAaaGAAATttACAGccattccagcgcaacggaaa-...364...atcatccagacc	gtgtgagt
R.Mac	gccaccag	gtaagtgagaat...1312...gcagtttgtttgaaagaatTCTGCAGGAaaGAAATttACAGccattccagcgcaacggaaa-...364...atcatccagacc	gtgtgagt
P.Tro	gccaccag	gtaagtgagaat...1311...gcagtttgtttgaaagaatTCTGCAGGAaaGAAATttACAGccattccagcgcaacggaaa-...364...atcatccagacc	gtgtgagt
P.Abe	gccaccag	gtaagtgagaat...1312...gcagtttgtttgaaagaatTCTGCAGGAaaGAAATttACAGccattccagcgcaacggaaa-...364...atcatccagacc	gtgtgagt
C.Jac	gccaccag	gtaagtgagaat...1302...gtagtttgtttgaaagaatTCTGCAGGAaaGAAATttACAGccattccagtgcaacggaaa-...364...atcatccagacc	gtgtgagt
M.Mus	gccaccag	gtaagtcccaca...1373...gcagtctgtgtgaaagaatTCTGCAGGAaaGAAATttACAGccattccagtgcaacggaaa-...374...atcatccagacc	ttgggagt
C.Por	gtcaccag	gtaagtgtgaac...1273...gcagtttgtttgaaagaatTCTGCAGGAaaGAAATttACAGctattccagtgcaacggaaa-...361...atcatccagacc	gtgtgagt
O.Cun	gccaccag	gtaagtgagaat...1305...gcagtttgtttgaaagaatTCTGCAGGAaaGAAATttATAGccattccagcgcaacggaaa-...364...atcatccagacc	gtgtgagg
C.Fam	gccaccag	gtaagtgagaat...1373...gcagtttgtttgaaagaatTCTGCAGGAaaGAAATttACAGccattccagcacaacggaaa-...364...atcatccagacc	gcgtgagt
F.Cat	gccaccag	gtaagtgagact...1322...gcagtttgtttgaaagaatTCTGCAGGAaaGAAATttACAGccattccagcgcaacggaaa-...364...atcatccagacc	gcgtgagt
B.Tau	gccaccag	gtaagtgagagt...1343...gcagtttgtttgaaagaatTCTGCAGGAaaGAAATttACAGccattccagcgcaacggaaa-...363...gtcactcagccc	gcgtgagt
E.Cab	gccaccag	gtaagtgagact...1309...gcagtctgtttgaaagaatTCTGCAGGAaaGAAATttACAGccattccagcgcaacggaaa-...364...atcatccagcct	gcgtgagt
O.Avi	gccaccag	gtaagtgagagt...1332...gcagtttgtttgaaagaatTCTGCAGGAaaGAAATttACAGccattccagcgcaacggaaa-...363...gtcactcagccc	gcgtgagt
L.Afr	gccaccag	gtaagtgagaat...1303...gcagtttgtttgaaagaatTCTGCAGGAaaGAAATttACAGccattccagtgcaacggaaa-...363...atcatccagccc	gtgtgagt

id=218447 gene=ENSG00000196628 name=TCF4 segment=chr18_53068922_53070684_-1 type=IN VIEW

Figure 759:



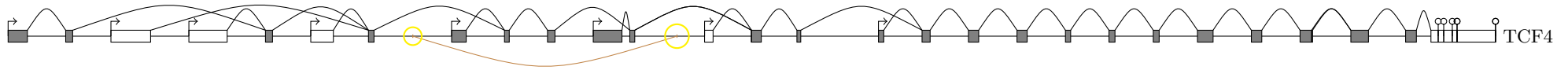
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R. Mac	tggctcaa	gtatgtaaattc...4690...	aaggaaggaatttacaaac	ATCTCCAAGAGAGGCC	-----atggtgaacggttgaaggaa--...220...	tctacggtcatc	gttaactc				
P. Tro	tggctcaa	gtatgtaaattc...4690...	aaggaaggaatttacaaac	ATCTCCAAGAGAGGCC	-----atggtgaacggttgaaggaa--...220...	tctacggtcatc	attagctc				
P. Abe	tggctcaa	gtatgtaaattc...4690...	aaggaaggaatttacaaac	ATCTCCAAGAGAGGCC	-----atggtgaacggttgaaggaa--...220...	tctacggtcatc	attaactc				
C. Jac	tggctcaa	gtatgtaaattc...4690...	aaggaaggaatttacaaac	ATCTCCAAGAGAGGCC	-----tgttgaacggttgaaggaaa...219...	tctacagtcac	attaactc				
M. Mus	tggctcaa	gtacgtgaattc...4685...	gaggaaggaatttacaaac	ATCTCCAAGAGAGGCC	TGGGgaGCGGctgt--aggaaatgaagcatgg...214...	ccagtcacgc	attagtca				
C. Por	tggctcaa	gtatgtaaattc...4690...	gaggaaggaatttacaaac	ATCTCCAAGAGAGGCC	-----tgttgaacggttgaaggaaa...219...	tctctcatc	attaacca				
O. Cun	tggctcaa	gtatgtaaattc...4691...	gaggaaggaatttacaaac	ATCTCCAAGAGAGGCC	ATGTTGAG--cgctgaaggaatgaggcac...211...	tccaccctcatg	gctaactg				
C. Fam	tggctcaa	gtatgtaaattc...4690...	gaggaaggaatttacaaac	ATCTCCAAGAGAGGCC	-----tgttgaacggttgaaggaaa...219...	tctaccgtcctc	attagctt				
F. Cat	tggctcaa	gtatgtaaattc...4690...	gaggaaggaatttacaaac	ATCTCCAAGAGAGGCC	-----tgttgaacggttgaaggaaa...219...	tctaccatcatc	attaactt				
E. Cab	tggctcaa	gtatgtaaattc...4690...	gaggaaggaatttacaaac	ATCTCCAAGAGAGGCC	-----tgttgaacggttgaaggaaa...219...	tctccatcatc	attaactc				
S. Sus	tggctcaa	gtatgtaaattc...4690...	gaggaaggaatttacaaac	ATCTCCAAGAGAGGCC	-----tgttgaacggttgaaggaaa...219...	tctccgtcatc	attaactc				
L. Afr	tggctcaa	gtatgtaaattc...4690...	gaggaaggaatttacaaac	ATCTCCAAGAGAGGCC	-----ctggtgagcagtcgaaggaa--...220...	aactcgaccatt	gtaactg				
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id=218437 gene=ENSG00000196628 name=TCF4 segment=chr18_53178001_53252510_-1 type=IN

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R. Mac	tactttac	gtatgtaaacat...57...	-----acaatttacacttttttgtc-	GTTTCTCTTGGcAG	GTaaaaca	
P. Tro	tactttac	gtatgtaaacat...56...	-----acaatttacacttttttgtc-	GTTTCTCTTGGcAG	GTaaaaca	
P. Abe	tactttac	gtatgtaaacat...57...	-----acaatttacacttttttgtc-	GTTTCTCTTGGcAG	GTaaaaca	
C. Jac	tactttac	gtatgtaaacat...53...	-----aaacataatttacacgtttt-	TGTCaTTTCTcTTGGcAG	GTaaaaca	
M. Mus	tcccctac	gtatgtaaacat...48...	gaggaaggaatttacaaac	CTGTTCTGttGTTTCTCTTGGcAG	GTaaaaca	
C. Por	tactttac	gtatgtaaacat...63...	-----acaatttatattttttgt-	TGTTTCTCTTGGcAG	GTaaaaca	
O. Cun	tactttac	gtatgtaaacat...51...	-----aaaaacatcatttacacttt-	TTTGTATTCTCTTGGcAG	GTaaaaca	
C. Fam	tactttac	gtatgtaaacat...60...	-----cataatttacacttttttgt-	TGTTTCTCTTGGcAG	GTaaaaca	
F. Cat	tactttac	gtatgtaaacat...56...	-----cgtaatttacacttttttgt-	TGTTTCTCTTGGcAG	GTaaaaca	
E. Cab	tactttac	gtatgtaaacat...55...	-----cacaatttacacttttttgt-	TGTTTCTCTTGGcAG	GTaaaaca	
S. Sus	tactttac	gtatgtaaacat...65...	-----cacttttgt-tttgtttgt-	TGTTTCTTGGcAG	GTaaaaca	
L. Afr	tactttgc	gtatgtaaacat...57...	-----accatttatacttttttgt-	GTTTCTCTTGGcAG	GTaaaaca	
	* * * *	*****	**	* *	*****	*****

id=218445 gene=ENSG00000196628 name=TCF4 segment=chr18_53070750_53070851_-1 type=IN VIEW

Figure 760:



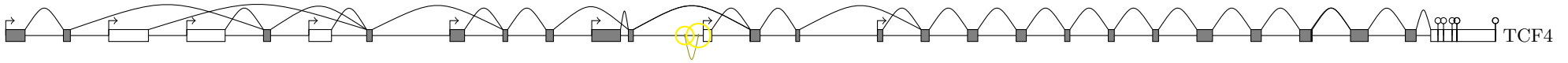
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R. Mac	tggctcaa	gtagttaaattc...4688...	taaaggaaggaatttacaa	ACATcTCCA	A	GAGAggcatg	ttgaacggttgaag-...223...	tctacggtcatc	gttaactc
P. Tro	tggctcaa	gtagttaaattc...4688...	taaaggaaggaatttacaa	ACATcTCCA	A	GAGAggcatg	ttgaacggttgaag-...223...	tctacggtcatc	attagctc
P. Abe	tggctcaa	gtagttaaattc...4688...	taaaggaaggaatttacaa	ACATcTCCA	A	GAGAggcatg	ttgaacggttgaag-...223...	tctacggtcatc	attaactc
C. Jac	tggctcaa	gtagttaaattc...4688...	taaaggaaggaatttacaa	ACATcTCCA	A	GAGAggcatg	ttgaacggttgaag-...223...	tctacggtcatc	attaactc
M. Mus	tggctcaa	gtactgtaattc...4683...	aagaggaaggaatttacaa	ACATcTCCA	A	GAGAggcctgggagcggctgtag-...228...	ccagtcacgcgc	attagtca	
R. Nor	gggctcaa	gtactgtaattc...4678...	aggaggaaggaatttacaa	ACATcTCCA	A	GAGAgg-ctgggagcggcaggagg...233...	gccgtcatcatc	ttagtca	
C. Por	tggctcaa	gtagttaaattc...4688...	tagaggaaggaatttacaa	ACATcTCCA	A	GAGAggcatg	ttgagcgggttaaag-...223...	tctctcatcatc	attaacca
O. Cun	tggctcaa	gtagttaaattc...4689...	tagaggaaggaatttacaa	ACATcTCCA	A	GAGAggcatg	ttgagcgggttaaag-...222...	tcaccctcatg	gctaactg
C. Fam	tggctcaa	gtagttaaattc...4688...	tagaggaaggaatttacaa	ACATcTCCA	A	GAGAggcatg	ttgaacggttgaag-...223...	tctaccgtcctc	attagctt
F. Cat	tggctcaa	gtagttaaattc...4688...	tagaggaaggaatttacaa	ACATcTCCA	A	GAGAggcatg	ttgaacggttgaag-...223...	tctaccatcatc	attaactt
E. Cab	tggctcaa	gtagttaaattc...4688...	tagaggaaggaatttacaa	ACATcTCCA	A	GAGAggcatg	ttgagcgggttgaag-...223...	tctccatcatc	attaactc
S. Sus	tggctcaa	gtagttaaattc...4688...	tagaggaaggaatttacaa	ACATcTCCA	A	GAGAggcatg	ttgaggggttgaag-...223...	tctgccgtcatc	attaactc
L. Afr	tggctcaa	gtagttaaattc...4688...	tagaggaaggaatttacaa	ACATcTCCA	A	GAGAggcctg	ttgagcagtcgaag-...223...	aactcgaccatt	gttaactg
	*****	*** ** ****	*****	*****	** **	*	**	**	**

id=218437 gene=ENSG00000196628 name=TCF4 segment=chr18_53178001_53252510_-1 type=IN

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R. Mac	gccaccag	gtaagtgagaat...1356...	attccagcgcaacggaaca	TCTTTGGAATGT	gagtgcaaatgttcgggcta...330...	atcatccagacc	gtgtgagt
P. Tro	gccaccag	gtaagtgagaat...1355...	attccagcgcaacggaaca	TCTTTGGAATGT	gagtgcaaatgttcgggcta...330...	atcatccagacc	gtgtgagt
P. Abe	gccaccag	gtaagtgagaat...1356...	attccagcgcaacggaaca	TCTTTGGAATGT	gagtgcaaatgttcgggcta...330...	atcatccagacc	gtgtgagt
C. Jac	gccaccag	gtaagtgagaat...1346...	attccagtgcaacggaaca	TCTTTGGAATGT	gagtgcaaatgttcgggcta...330...	atcatccagacc	gtgtgagt
M. Mus	gccaccag	gtaagtcccaca...1417...	attccagtgcaacggaaca	TCTTTGGAATGT	gagtgcaaatgttcgggcta...330...	atcatccagacc	gtgtgagt
R. Nor	gccaccag	gtaagtccact...1452...	attcgggtgcaacggaaca	TCTTTGGAATGT	gagtgcaaatgttcgggcta...332...	atcatccagacc	gtgtgagt
C. Por	gtcaccag	gtaagtgtgaac...1317...	attccagtgcaacggaaca	TCTTTGGAATGT	gagtgcaaatgttcgggcta...327...	atcatccagacc	gtgtgagt
O. Cun	gccaccag	gtaagtgagaat...1349...	attccagcgcaacggaaca	TCTTTGGAATGT	gagtgcaaatgttcgggcta...330...	atcatccagacc	gtgtgagg
C. Fam	gccaccag	gtaagtgagaat...1417...	attccagcacaacggaaca	TCTTTGGAATGT	gagtgcaaatgttcgggcta...330...	atcatccagacc	gcgtgagt
F. Cat	gccaccag	gtaagtgagact...1366...	attccagcgcaacggaaca	TCTTTGGAATGT	gagtgcaaatgttcgggcta...330...	atcatccagacc	gcgtgagt
E. Cab	gccaccag	gtaagtgagact...1353...	attccagcgcaacggaaca	TCTTTGGAATGT	gagtgcaactgttcgggcta...330...	atcatccagacc	gcgtgagt
S. Sus	gccaccag	gtaagtgagaac...1378...	attccagcgcaacggaaca	TCTTTGGAATGT	gagtgcaaatgttcgggcta...335...	atcatccagacc	gcgtgagt
L. Afr	gccaccag	gtaagtgagaat...1347...	attccagtgcaacggaaca	TCTTTGGAATGT	gagtgcaaatgttcgggcta...329...	atcatccagacc	gtgtgagt
	* *****	***** *	**** * ** **	*****	** **	***** *	* **

id=218447 gene=ENSG00000196628 name=TCF4 segment=chr18_53068922_53070684_-1 type=IN VIEW

Figure 761:



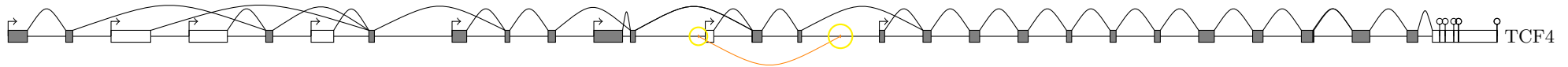
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R.Mac	gccaccag	gtaagtgagaat...1474...----	agtgtgttcctgtgggtctg	GTTT	TGAGGGTCA	aggcggaggtcattagagtt...210...atcatccagacc	gtgtgagt
P.Tro	gccaccag	gtaagtgagaat...1473...----	agcgtgttcctgtgggtctg	GTTT	TGAGGGTCA	aggcggaggtcattagagtt...210...atcatccagacc	gtgtgagt
P.Abe	gccaccag	gtaagtgagaat...1474...----	agcatgttcctgtgggtctg	GTTT	TGAGGGTCA	aggcggaggtcattagagtt...210...atcatccagacc	gtgtgagt
C.Jac	gccaccag	gtaagtgagaat...1464...----	agcgtgttcctgtgggtctg	GTTT	TGAGGGTCA	aggcggaggtcattagagtt...210...atcatccagacc	gtgtgagt
M.Mus	gccaccag	gtaagtcccaca...1532...gaaaagccggttcctgtggg	CTGGTTT	TGAGGGTCA	aggcagaggtcgccagagtt...219...atcatccagacc	ttgggagt	
C.Por	gtcaccag	gtaagtgtgaac...1435...----	agccggttcctgtggatctg	GTTT	TGAGGGTCA	aggcggaggtcactagagtt...207...atcatccagacc	gtgtgagt
O.Cun	gccaccag	gtaagtgagaat...1467...----	agcctgttcctgtgggtctg	GTTT	TGAGGGTCA	aggcagaggtcattagagtt...210...atcatccagacc	gtgtgagg
F.Cat	gccaccag	gtaagtgagact...1484...----	agccggttcctgtgtatctg	GTTT	TGAGGGTCA	aggcagaggtcattagagtt...210...atcatccagacc	gcgtgagt
B.Tau	gccaccag	gtaagtgagagt...1505...----	agcctgttcctgtgtatctg	GTTT	TGAGGGTCA	aagcagaggtcgtttgagtt...210...gtcactcagccc	gcgtgagt
E.Cab	gccaccag	gtaagtgagact...1471...----	agcctgttcctgtgtatctg	GTTT	TGAGGGTCA	aggcagaggtcattagagtt...210...atcatccagcct	gcgtgagt
S.Sus	gccaccag	gtaagtgagaac...1494...----	agcctgttcctgtggatctg	GTTT	TGAGGGTCA	aggcagaggtcgctggagtt...217...atcatccagacc	gcgtgagt
L.Afr	gccaccag	gtaagtgagaat...1465...----	agcctgatcctgtgtatctg	GTTT	TGAGGGTCA	aggcagaggtcactagagtt...209...atcatccagccc	gtgtgagt
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id=218447 gene=ENSG00000196628 name=TCF4 segment=chr18_53068922_53070684_-1 type=IN

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R.Mac	gccaccag	gtaagtgagaat...1652...cttactaataggaattggcg	TGAT	CCTCA	AGAC	acaaagatttcctctgctga-----..31...atcatccagacc	gtgtgagt
P.Tro	gccaccag	gtaagtgagaat...1651...cttactaataggaattggcg	TGAT	CCTCA	AGAC	acaaagatttcctctgctga-----..31...atcatccagacc	gtgtgagt
P.Abe	gccaccag	gtaagtgagaat...1652...cttactaataggaattggcg	TGAT	CCTCA	AGAC	acaaagatttcctctgctga-----..31...atcatccagacc	gtgtgagt
C.Jac	gccaccag	gtaagtgagaat...1642...cttactaataggaattggcg	TGAT	CCTCA	AGAC	acaaagatttcctctgctga-----..31...atcatccagacc	gtgtgagt
M.Mus	gccaccag	gtaagtcccaca...1723...cttactaataggcattggca	TGAT	CCTCA	AGACaCAGA	gatttcctctgctgagtaag..26...atcatccagacc	ttgggagt
C.Por	gtcaccag	gtaagtgtgaac...1610...cttactaataggaattggcg	TGAT	CCTCA	AGAC	acaaagatttcctctgctga-----..31...atcatccagacc	gtgtgagt
O.Cun	gccaccag	gtaagtgagaat...1645...cttcctaataggaattggcg	TGAT	CCTCA	AGAC	acaaagatttcctctgctga-----..31...atcatccagacc	gtgtgagg
F.Cat	gccaccag	gtaagtgagact...1662...cttactaataggaattggcg	TGAT	CCTCA	AGAC	acaaagatttcctctgctga-----..31...atcatccagacc	gcgtgagt
B.Tau	gccaccag	gtaagtgagagt...1683...cttcctaataggaattggcg	TGAT	CCTC	ccAGAC	acaaagatttcctctgctga-----..31...gtcactcagccc	gcgtgagt
E.Cab	gccaccag	gtaagtgagact...1649...cttactaataggaattggcg	TGAT	CCTCA	AGAC	acaaagatttcctctgctga-----..31...atcatccagcct	gcgtgagt
S.Sus	gccaccag	gtaagtgagaac...1679...cttactaataggaattggcg	TGAT	CCTC	ccAGAC	acaaagatttcctctgctga-----..31...atcatccagacc	gcgtgagt
L.Afr	gccaccag	gtaagtgagaat...1642...cttactaataggaattggcg	TGAT	CCTCA	AGAC	acaaagatttcctctgctga-----..31...atcatccagccc	gtgtgagt
		* *****	***** *			* * *****	***** * * * * *

id=218447 gene=ENSG00000196628 name=TCF4 segment=chr18_53068922_53070684_-1 type=IN VIEW

Figure 762:



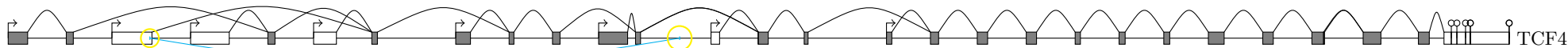
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R.Mac	gccaccag	gtaagtgagaat...1623...---	gaataggcttcctcgccct	GTATCCTTCTT	CTAA	taggaattggcgtgattcct...58...atcatccagacc	gtgtgagt
P.Tro	gccaccag	gtaagtgagaat...1622...---	gaataggcttcctcgccct	GTATCCTTCTT	CTAA	taggaattggcgtgattcct...58...atcatccagacc	gtgtgagt
P.Abe	gccaccag	gtaagtgagaat...1623...---	gaataggcttcctcgccct	GTATCCTTCTT	CTAA	taggaattggcgtgattcct...58...atcatccagacc	gtgtgagt
C.Jac	gccaccag	gtaagtgagaat...1613...---	gaataggcttcctcgccct	GTATCCTTCTT	CTAA	taggaattggcgtgattcct...58...atcatccagacc	gtgtgagt
M.Mus	gccaccag	gtaagtcccaca...1694...---	gaataggcttcctagaccct	GTATCCTTCTT	CTAA	taggcattggcatgattcct...58...atcatccagacc	ttgggagt
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C.Por	gtcaccag	gtaagtgtgaac...1578...agagaataggcttcctcgcc	CCTGTATCCTTCTT	CTAA	taggaattggcgtgattcct...58...atcatccagacc	gtgtgagt	
O.Cun	gccaccag	gtaagtgagaat...1616...---	gaataggcttcctcgccct	GTATCCTTCTT	CTAA	taggaattggcgtgattcct...58...atcatccagacc	gtgtgagt
B.Tau	gccaccag	gtaagtgagagt...1654...---	gaatagacttcctcgccct	GTATCCTTCTT	CTAA	taggaattggcgtgattcct...58...gtcactcagccc	gcgtgagt
E.Cab	gccaccag	gtaagtgagact...1620...---	gaataggcttcctcgccct	GTATCCTTCTT	CTAA	taggaattggcgtgattcct...58...atcatccagacc	gcgtgagt
S.Sus	gccaccag	gtaagtgagaac...1650...---	gaataggcttcctcgccct	GTATCCTTCTT	CTAA	taggaattggcgtgattcct...58...atcatccagacc	gcgtgagt
L.Afr	gccaccag	gtaagtgagaat...1616...---	taagcttcctcgccctgta	TCCTTCTT	CTAA	taggaattggcgtgattcct...58...atcatccagccc	gtgtgagt
	* *****	***** *	** *****	***** *****	***** ** *****	*** ** *	* **

id=218447 gene=ENSG00000196628 name=TCF4 segment=chr18_53068922_53070684_-1 type=IN

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R.Mac	catcttca	gtaagtactgct...4529...aaggcagttgag-tggaatt-	TTAGagAAGAAA	-GGGTGC	ctagaacaaaacaaaacaaa-----	...377...gaatccgagacc	atgtactg
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Figure 763:



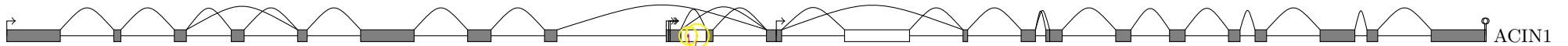
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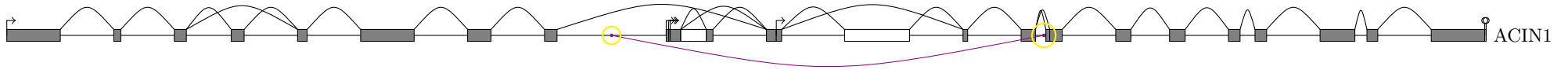
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Figure 765:



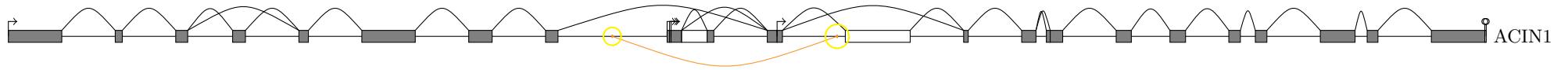
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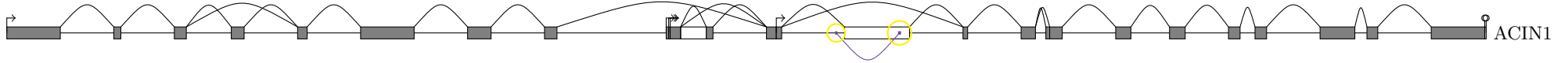
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S. Sus	ctcactgt	gtaagtgataac...4924...-ccctgctgcagcagggccct	CCCCCATCCGCACACAC	gggctgctgggtaagt	ggcaagat
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R. Mac	agaaagag	gtaaacatcaa...675...----gtgtgtagcctttttctggt	GTGTGtTGCGg	GGGTGGGGG	ccggtgaaagtgatttgatg...41...actttgtccaag	tacctcat
P. Tro	agaaagag	gtaaacatcaa...679...----gtgtgtagcctttttctggt	GTGTGtTGCGg	GGGTGGGGG	ccggtgaaagtgatttgatg...41...actttgtccaag	tacctcat
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Figure 767: CS=10.92



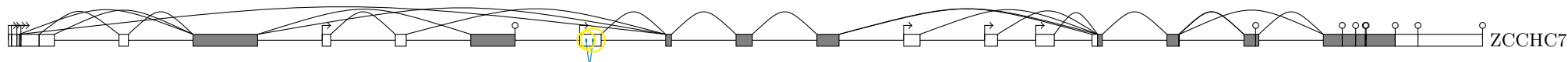
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R. Mac	agaagag	gtaaacatccaa...672...	tgtgtgtgtagccttttct	----	GGTGTGTGTG	cGGGGGTGGG	ggccggtgaaagtgatttgatgtgcagaatattattattattacaaggctccttctccccgtaaaactttgtccaag	tacctcat
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P. Abe	agaagag	gtaaacatccaa...676...	tgtgtgtgtagccttttct	----	GGTGTGTGTG	cGGGGGTGGG	ggccggtgaaagtgatttgatgtgcagaatattattattattacaaggctccttctccccgtaaaactttgtccaag	tacctcat
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M. Mus	agaagag	gtaactagccaa...701...	tgtgtgtgtagccttttct	----	GGTGTGTGTG	cGGGGGTGGG	ggccggtgaaagtgatttgatgtgcagaatattattattattacaaggctccttctccccgtaaaactttgtccaag	tacctcat
R. Nor	ggaagag	gtaactagccaa...650...	-tgtgtgtgtagccttttctga	----	TGTGTGTG	cGGGGGTGGG	ggccggtgaaagtgatttgatgtgcagaatattattattattacaaggctccttctccccgtaaaactttgtccaag	tacctcat
C. Por	agaagag	gtaaatatccaa...650...	tgtgtgtgtagctgttctct	----	GGTGTGTGTG	cGGGGGTGGG	gaccggtgaaagtgatttgatgtgcagaatattattattattacaaggctccttctccccgtaaaactttgtccaag	tacctcat
O. Cun	agaagag	gtaactatccaa...661...	tgtgtgtgtagccttttct	----	GGTGTGTGTG	cGGGGGTGGG	ggccggtgaaagtgatttgatgtgcagaatattattattattacaaggctccttctccccgtaaaactttgtccaag	cacctcat
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F. Cat	agaagag	gtaaatatccaa...682...	cgtgtgtgtagccttttct	----	GGTGTGTGTG	cGGGGGTGGG	ggccggtgaaagtgatttgatgtgcagaatattattattattacaaggctccttctccccgtaaaactttgtccaag	tacctcat
B. Tau	agaagag	gtaaatatccaa...674...	tgtgtgtgtagccttttct	----	GGTGTGTGTG	cGGGGGTGGG	ggccggtgaaagtgatttgatgtgcagaatattattattattacaaggctccttctccccgtaaaactttgtccaag	tacctcat
E. Cab	agaagag	gtaaatatgcaa...683...	tgtgtgtgtagccttttct	----	GGTGTGTGTG	cGGGGGTGGG	ggccggtgaaagtgatttgatgtgcagaatattattattattacaaggctccttctccccgtaaaactttgtccaag	tacctcat
S. Sus	agaagag	gtaaatatccaa...662...	tgtgtgtgtagccttttct	----	GGTGTGTGTG	cGGGGGTGGG	ggccggtgaaagtgatttgatgtgcagaatattattattattacaaggctccttctccccgtaaaactttgtccaag	tacctcat
O. Avi	agaagag	gtaaatatccaa...760...	-----gtccttctccccgtaaaac	TTTGTCCAAGTACCTCA	-----	-----	-----	-----t
L. Afr	agaagag	gtaaatatccaa...666...	tgtgtgtgtagccttttct	----	GGTGTGTGTG	cGGGGGTGGG	ggccggtgaaagtgatttgatgtgcagaatattattattattacaaggctccttctccccgtaaaactttgtccaag	tacctcat
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id=607015 gene=ENSG00000100813 name=ACIN1 segment=chr14_23537881_23538684_-1 type=IN

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R. Mac	tgtccaag	tacctcatgtac...1214...	gcgcccaccttttttgc-caa	CCCAac	CCCCac	CAATt	GCACA	CGCC	tagcagggagggtcattctgattggaccggcggttgactagatacagtagcagtgaggtgcgattggctgaactgaagatcccag	gtgtgaga
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P. Abe	tgtccaag	tacctcatgtac...1215...	gcgcccaccttttttgc-caa	CCCAac	CCCCac	CAATt	GCACA	CGCC	tagcagggagggtcattctgattggaccggcggttgactagatacagtagcagtgaggtgcgattggctgaactgaagatcccag	gtgtgaga
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R. Nor	tgtccaag	tacctcatgtac...1208...	gcgcccaccttttttgc-caa	CCCAac	CCCCac	CAATt	GCACA	CGCC	acgcctagcagggagggtcattctgattgga-cggcggttgactagatacagtagcagtgaggtgcgattggctgaactgaagatcccag	gtgtgaga
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O. Cun	tgtccaag	cacctcatgtac...1226...	-----ccttttttgc-ca	acccaacc	CCCCac	CAATt	GCACA	CGCC	tagcagggagggtcattctgattggaccggcggttgactagatacagtagcagtgaggtgcgattggctgaactgaagatcccag	gtgtgaga
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L. Afr	tgtccaag	tacctcatgtac...1227...	-----ccttttttgc-ca	acccaacc	CCCCac	CAATt	GCACA	CGCC	tagcagggagggtcattctgattggaccggttgactagatacagtagcagtgaggtgcgattggctgaactgaagatcccag	gtgtgaga
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Figure 768: CS=4.8



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R.Mac	atacttgt	accacc-----aaa-----aaagagagagagagagaaagc	GACTTt	GTTTc	GCAAAc	gTTGg	cctaagctttgaaaacctg...	78...	acacaaaaacag	gtagaaac
P.Tro	atacttgt	accacc-----aaaa-----aaaaagagagagagagaaagc	GACTTt	GTTTc	GCAAAc	gTTGg	cctaagctttgaaaacctg...	78...	gcacaaaaacag	gtagaaac
P.Abe	atacttgt	accacccaaaaa-----aaagagagagagagagaaagc	GACTTt	GTTTc	GCAAAc	gTTGg	gtaagctttgaaaacctg...	78...	acacaaaaacag	gtagaaac
C.Jac	atacttgt	accacc-----aaa-----aaaaagagagagagagaaagc	GACTTt	GTTTc	GCAAAc	gttgccctaagctttgaaa-----	...	84...	acacagaaacag	gtagaagc
C.Por	atacttgt	accacccaaaaa-----gggagagagagagacagacagc	GACTTt	GTTTc	GCAAAc	cgctgcctaagctttgaaa-----	...	83...	acacaaaaacag	gtagaagc
O.Cun	atacttgt	accacc-----aaa-----aaaaagagagagagagaaagc	GACTTt	GTTTc	GCAAAc	cgctgcctaagctttgaaa-----	...	83...	acacaaaaacag	gtagaaac
C.Fam	atacttgt	accacc-----aaa-----aaagagagagagagagaaagc	GACTTt	GTTTc	GCAAAc	cgtagcctaagctttgaaa-----	...	83...	acacaaaaacag	gtagaaac
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B.Tau	atacttgt	actcacc-----aaaa-----aaaaacagagagagagaaagc	GACTTt	GTTTc	GCAAAc	cgtagcctaagctttgaaa-----	...	83...	acacgaaacag	gtagaaac
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S.Sus	atacttgt	accacc-----aaa-----aaagagagagagagagaaagc	GACTTt	GTTTc	GCAAAc	cgtagcctaagctttgaaa-----	...	83...	acacaaaaacag	gtagaaac
O.Avi	atacttgt	accacc-----aaa-----aaaaacagagagagagaaagc	GACTTt	GTTTc	GCAAAc	cgtagcctaagctttgaaa-----	...	83...	acacaaaaacag	gtagaaac
L.Afr	atacttgt	accatcaaaaaaggagagagagagagagaaagc	GACTTt	GTTTc	GCAAAc	cgtagcctaagctttgaaa-----	...	83...	acacaaaaacag	gtagaaac
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R.Mac	atacttgt	accacccaaaaa...46...gctttgaaaacctgagcca	TTGAg	TTTGTGAAT	tAAGTT	agacagtaacagaggccaag...	31...	acacaaaaacag	gtagaaac
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P.Abe	atacttgt	accacccaaaaa...49...gctttgaaaacctgagcca	TTGAg	TTTGTGAAT	tAAGTT	agacagtaacagaggccaag...	31...	acacaaaaacag	gtagaaac
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F.Cat	atacttgt	accacccaaaaa...54...-----aaaaccacgagccattgagt	TTTGTGAAT	tAAGTT	agacagcaacagaggccaag...	30...	acacaaaaacag	gtagaaac	
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O.Avi	atacttgt	accacccaaaaa...52...-----aaaaccacgagccattgagt	TTTGTGAAT	tAAGTT	agaaagcaacagaggccaag...	30...	acacaaaaacag	gtagaaac	
L.Afr	atacttgt	accatcaaaaa...61...-----aaaacctgagccattgagt	TTTGTGAAT	tAAGTT	agacagcaacagaggccaag...	30...	acacaaaaacag	gtagaaac	
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id=520649 gene=ENSG00000147905 name=ZCCHC7 segment=chr9_37284160_37284325_1 type=AN VIEW

Figure 769:



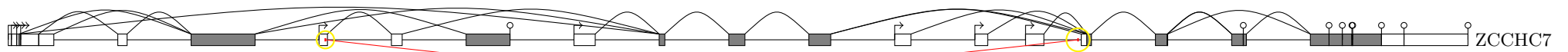
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R. Mac	atacttgt	accacacaaaaag-----agagagagagagaaaagcgactttgttctgcaaacgttggccta	AGCTTTGAAAAC	atgagccattgagttttgtg...61...-acacaaaaacag	gtagaaac
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C. Por	atacttgt	accacacaaaaaag---ggagagagagagacagacgactttgttctgcaaacgtgccta	AGCTTTGAAAAC	atgagccattgagttttgtg...60...-acacaaaaacag	gtagaagc
O. Cun	atacttgt	accacacaaaaaa-----agagagagagagaaaagcgactttgttctgcaaacgttgccta	AGCTTTGAAAAC	atgagccattgagttttgtg...60...-acacaaaaacag	gtagaaac
C. Fam	atacttgt	accacacaaaaaag-----agagagagagagaaaagcgactttgttctgcaaacgtagccta	AGCTTTGAAAAC	acagccattgagttttgtg...60...-acacaaaaacag	gtagaaac
B. Tau	atacttgt	actcacacaaaaaa-----aaacagagagagagaaaagcgactttgttctgcaaacgtaacccta	AGCTTTGAAAAC	acagccattgagttttgtg...60...-acacgaaaaacag	gtagaaac
E. Cab	atacttgt	actcacacaaaaaa-----aag-agagagagagaaaagcgactttgttctgcaaacgtagcccta	AGCTTTGAAAAC	acagccattgagttttgtg...60...-acacaaaaacag	gtagaaac
O. Avi	atacttgt	accacacaaaaaa-----a--cagagagagagaaaagcgactttgttctgcaaacgtagcccta	AGCTTTGAAAAC	acagccattgagttttgtg...60...-acacaaaaacag	gtagaaac
L. Afr	atacttgt	accatcaaaaaaggagagagagagagagaaaagcgactttgttctgcaaacgttgccta	AGCTTTGAAAAC	atgagccattgagttttgtg...60...-acacaaaaacag	gtagaaac
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id=520649 gene=ENSG00000147905 name=ZCCHC7 segment=chr9_37284160_37284325_1 type=AN

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R. Mac	tgtacttg	gtgagttttgtt...158...tcaattaaactgtctagcca	GGTTTTGAAGCT	gaaatgcagaccctttctgt...59...aggctgtaaagt	accttggt
P. Tro	tgtacttg	gtgagttttatt...156...tcaattaaactgtctagcca	GGTTTTGAAGCT	gaaatgcagaccctttctgt...59...aggctgtaaagt	accttggt
C. Jac	tgtacttg	ttgagttttatt...160...tcaattaaactgtctagcca	GGTTTTGAAGCT	gaaatgcagaccctttctgt...59...aggctgtaaagt	accttggt
M. Mus	cactctag	gttagtcttaca...145...tcaattaaaccgtctagcca	GGTTTTGAAGCT	gaaatgcagaccctttctgt...59...aggctgtaaagt	accttggt
R. Nor	ctctctag	gttagtcttacc...154...tcaattaaaccgtctagcca	GGTTTTGAAGCT	gaaatgcagaccctttctgt...59...aggctgtaaagt	accttggt
C. Por	tattcttg	atgaaatcttacc...159...tcaattaaactgtctagcca	GGTTTTGAAGCT	gaaatgcagaccctttctgt...59...aggctgtaaagt	accttggt
O. Cun	tgtctttg	gtgcttcttatt...165...tcaattaaactgtctagcca	GGTTTTGAAGCT	gaaatgcagaccctttctgt...59...aggctgtaaagt	accttggt
C. Fam	tgtactca	gtgagtccttatt...162...tcaattaaactgtctagcca	GGTTTTGAAGCT	gaaatgcagaccctttctgt...59...aggctgtaaagt	accttggt
B. Tau	tgtacttg	gtgagtccttatt...161...tcaattaaactgtctagcca	GGTTTTGAAGCT	gaaatgcagaccctttctgt...59...aggctgtaaagt	accttggt
E. Cab	tgtacttg	gtgagtccttatt...160...tcaattaaactgtctagcca	GGTTTTGAAGCT	gaaatgcagaccctttctgt...59...aggctgtaaagt	accttggt
O. Avi	tgtacttg	gtgagtccttatt...162...tcaattaaactgtctagcca	GGTTTTGAAGCT	gaaatgcagaccctttctgt...59...aggctgtaaagt	accttggt
L. Afr	tatagttg	gtgagttttatt...160...tcaattaaactgtctagcca	GGTTTTGAAGCT	gaaatgcagaccctttctgt...59...aggctgtaaagt	accttggt
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id=520662 gene=ENSG00000147905 name=ZCCHC7 segment=chr9_37327460_37327751_1 type=IN VIEW

Figure 770:



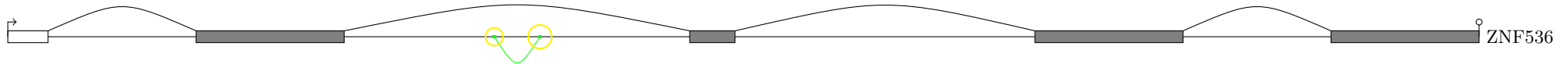
H. Sap	cagggccca	cggggtcaatgtcagatttagtcatgctgttattt	TAGCCCAGTgGTCCA	----	gagagatgactgaaaa	gtgagtct
R. Mac	cagggccca	cggggtcaatgtcagatttagtcatgctgttattt	TAGCCCAGTgGTCCA	----	gagagatgactgaaaa	gtgagtct
P. Tro	cagggccca	cggggtcaatgtcagatttagtcatgctgttattt	TAGCCCAGTgGTCCA	----	gagagatgactgaaaa	gtgagtct
C. Jac	cagggccca	cggggtcaatgtcagatttagtcatgctgttattt	TAGCCCAGTgGTCCA	----	gagagatgactgaaaa	gtgagtct
M. Mus	cagggccca	cggggtcaatgtcagatttagtcatgctgttattt	TAGCCCAGTgGTCCA	----	gagagatgactgaaaa	gtgagtct
R. Nor	cagggccca	cggggtcaatgtcagatttagtcatgctgttattt	TAGCCCAGTgGTCCA	----	gagagatgactgaaaa	gtgagtct
C. Por	cagggccca	cggggtcaatgtcagatttagtcatgctgttattt	TAGCCCAGTgGTCCA	----	gagagatgactgaaaa	gtgagtct
O. Cun	cagggccca	cggggtcaatgtcagatttagtcatg-----	CTGTtATTTTAGCccagtggccagagagatgactgaaaa	----	gagagatgactgaaaa	gtgagtct
C. Fam	cagggccca	cggggtcaatgtcagatttagtcatgctgttattt	TAGCCCAGTgGTCCA	----	gagagatgactgaaaa	gtgagtct
B. Tau	cagggccca	cggggtcaatgtcagatttagtcatgctgttattt	TAGCCCAGTgGTCCA	----	gagagatgactgaaaa	gtgagtct
E. Cab	cagggccca	cggggtcaatgtcagatttagtcatgctgttattt	TAGCCCAGTgGTCCA	----	gagagatgactgaaaa	gtgagtct
S. Sus	cagggccca	cggggtcaatgtcagatttagtcatgctgttattt	TAGCCCAGTgGTCCA	----	gagagatgactgaaaa	gtgagtct
O. Avi	cagggccca	cggggtcaatgtcagatttagtcatgctgttattt	TAGCCCAGTgGTCCA	----	gagagatgactgaaaa	gtgagtct
L. Afr	cagggccca	cggggtcaatgtcagatttagtcatgctgttattt	TAGCCCAGTgGTCCA	----	gagagatgactgaaaa	gtgagtct
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id=520643 gene=ENSG00000147905 name=ZCCHC7 segment=chr9_37144929_37144994_1 type=AN

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R. Mac	tgtacttg	gtgagttttgtt...223...tttcctgtgaccgacaccgg	TGGATGCTGGGTTA	-----	tgccaaaaccaacaggctgtaaagt	accttgtt
P. Tro	tgtacttg	gtgagttttatt...221...tttcctgtgaccgacaccgg	TGGATGCTGGGTTA	-----	tgccaaaaccaacaggctgtaaagt	acctgttt
C. Jac	tgtacttg	ttgagttttatt...225...tttcctgtgaccgacaccag	TGGATGCTGGGTTA	-----	tgccaaaaccaacaggctgtaaagt	accttgtt
M. Mus	cactctag	gttagtcttaca...210...tttcctgtgaccgacaccgg	TGGATGCTGGGTTA	-----	tgccaaaaccaacaggctgtaaagt	accttgtt
R. Nor	ctctctag	gttagtcttacc...219...tttcctgtgaccgacaccgg	TGGATGCTGGGTTA	-----	tgccaaaaccaacaggctgtaaagt	accttgtt
C. Por	tattcttg	atgaatcttacc...224...tttcctgtgaccgacaccgg	TGGATGCTGGGTTA	-----	tgccaaaaccaacaggctgtaaagt	accttgtt
O. Cun	tgtccttg	gtgcgtcttatt...175...tgtctag-----	ccaggtttttgaaGCTGAAATGCAGaccctttctgttaagcttcttattttcctgtgaccgacaccgg	tgatgctgggttat	tgccaaaaccaacaggctgtaaagt	accttgtt
C. Fam	tgtactca	gtgagcttatt...227...tttcctgtgaccgacaccgg	TGGATGCTGGGTTA	-----	tgccaaaaccaacaggctgtaaagt	accttgtt
B. Tau	tgtacttg	gtgagcttatt...226...tttcctgtgaccgacaccgg	TGGATGCTGGGTTA	-----	tgccaaaaccaacaggctgtaaagt	accttgtt
E. Cab	tgtacttg	gtgagcttatt...225...tttcctgtgaccgacaccgg	TGGATGCTGGGTTA	-----	tgccaaaaccaacaggctgtaaagt	accttgtt
S. Sus	tgtgcttg	gtgagcttatt...225...tttcctgtgaccgacaccgg	TGGATGCTGGGTTA	-----	tgccaaaaccaacaggctgtaaagt	accttgtt
O. Avi	tgtacttg	gtgagcttatt...227...tttcctgtgaccgacaccgg	TGGATGCTGGGTTA	-----	tgccaaaaccaacaggctgtaaagt	accttgtt
L. Afr	tatagttg	gtgagttttatt...225...tttcctgtgaccgacactgg	TGGATGCTGGGTTA	-----	tgccaaaaccaacaggctgtaaagt	accttgtt
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id=520662 gene=ENSG00000147905 name=ZCCHC7 segment=chr9_37327460_37327751_1 type=IN VIEW

Figure 771:



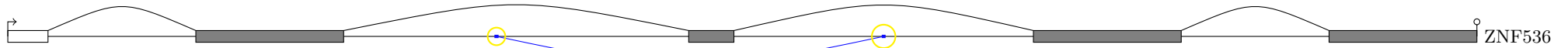
H. Sap	ctcctcag	gtaggttagctg...	4693	..	aaagaagaatcaaaccagc	TGCTgACACagCTGTTTctTTTCttGTTT	aattcagttcaatataaagg-----	..203...	ccttcgctgcag	acattggc	
R. Mac	ctcctcag	gtaggttagcgg...	4693	..	aaagaagaatcaaaccagc	TGCTgACACagCTGTTTctTTTCttGTTT	aattcagttcaatataaagg-----	..203...	ccttcgctgcag	acattggc	
P. Tro	ctcctcag	gtaggttagctg...	4693	..	aaagaagaatcaaaccagc	TGCTgACACagCTGTTTctTTTCttGTTT	aattcagttcaatataaagg-----	..203...	ccttcgctgcag	acattggc	
P. Abe	ctcctcag	gtaggttagctg...	4693	..	aaagaagaatcaaaccagc	TGCTgACACagCTGTTTctTTTCttGTTT	aattcagttcaatataaagg-----	..203...	ccttcgctgcag	acattggc	
C. Jac	ctcctcag	gtaggttagcgg...	4693	..	aaagaagaatcaaaccagc	TGCTgACACagCTGTTTctTTTCttGTTT	aattcagttcaatataaagg-----	..203...	ccttcgctgcag	acattggc	
M. Mus	ttcctcag	gtaggttgca...	4693	..	aaagaagaatcaaaccagc	TGCTgACACagCTGTTT	----cttctctgtttaattcagt-----	..215..	catccactgcag	acatcggc	
R. Nor	ttcctcag	gtaggttaacaa...	4693	..	aaagaagaatcaaaccagc	TGCTgACACagCTGTTT	----cttctctgtttaattcagt-----	..215..	catccactgcag	acatcggc	
C. Por	ctcctcag	gtaggttgctg...	4693	..	aaagaagaatcaaaccagc	TGCTgACACagCTGTTT	----cttctctgtttaattcagt-----	..215..	cctccactgcag	acatcggg	
O. Cun	ctcctcag	gtacgtaggcgg...	4693	..	aaagaagagatccaaccagc	TGCTgACACagCTGTTTctTTTC	ttgttaattcagttcaata-----	..209..	cctccgctgcag	acatgggc	
F. Cat	ctcctcag	gtaggccgcccag...	4695	..	aaagaagaatcaaaccagc	TGCTgACACagCTGTTTctTTTC	ttGTTTaaTTCAGTTcaatataaagg	taccatgatg...192..	cctccgctgcag	acctcggc	
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E. Cab	ctcctcag	gtaggttgccgg...	4693	..	aaagaagaatcaaaccagc	TGCTgACACagCTGTTTctTTTC	ttgtgtaattcagttcaata-----	..209..	cctccgctgcag	acatcggc	
O. Avi	ctcctcag	gtaggttgctg...	4693	..	aaagaagaatcaaaccagc	TGCTgACACagCTGTTTctTTTC	ttGTTT	aattcagttcaatataaagg-----	..203..	cctccgctgcag	acattggc
L. Afr	ctcctcag	gtaggccgcccag...	4695	..	aaagaagaatcaaaccagc	TGCTgACACagCTGTTTctTTTC	ttGTTT	aattcagttcaatataaagg-----	..201..	cctccgctgcag	acattggg
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id=414760 gene=ENSG00000198597 name=ZNF536 segment=chr19_30936640_31025753.1 type=IN

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R. Mac	ctcctcag	gtaggttagcgg...	4838	..	-----agcattctgtcagatttaa	GAATGAAAtAGACAGGTGTAGTA	ttgacatgtttaactttgtg...	..64..	ccttcgctgcag	acattggc
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P. Abe	ctcctcag	gtaggttagctg...	4838	..	-----agcattctgtcagatttaa	GAATGAAAtAGACAGGTGTAGTA	ttgacatgtttaactttgtg...	..64..	ccttcgctgcag	acattggc
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M. Mus	ttcctcag	gtaggttgca...	4847	..	-----tcagattcaaagaatgaaat	AGACAGGTGTAGTA	ttgacatgtttaactttgtg...	..64..	catccactgcag	acatcggc
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C. Por	ctcctcag	gtaggttgctg...	4847	..	-----tcagatttaaagaatgaaat	AGACAGGTGTAGTA	ttgacatgtttaactttgtg...	..64..	cctccactgcag	acatcggg
O. Cun	ctcctcag	gtacgtaggcgg...	4842	..	-----ttctgtcagagctcaagaat	GAAAtAGACAGGTGTAGTA	ttgacatgcttaactttgtg...	..64..	cctccgctgcag	acatgggc
F. Cat	ctcctcag	gtaggccgcccag...	4832	..	gaattgtcagcattctgtca	GATTGAAaGAATGAAAtAGACAGGTGTAGTA	ttgacatgtttcactttgtg...	..62..	cctccgctgcag	acctcggc
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E. Cab	ctcctcag	gtaggttgccgg...	4842	..	-----ttctgtcagatttaaagaat	GAAAtAGACAGGTGTAGTA	ttgacatgtttaactttgtg...	..64..	cctccgctgcag	acatcggc
O. Avi	ctcctcag	gtaggttgctg...	4838	..	-----agcattctgtcagatttaga	GAATGAAAtAGACAGGTGTAGTA	ttgacatgtttaactttgtg...	..64..	cctccgctgcag	acattggc
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id=414760 gene=ENSG00000198597 name=ZNF536 segment=chr19_30936640_31025753.1 type=IN VIEW

Figure 772:



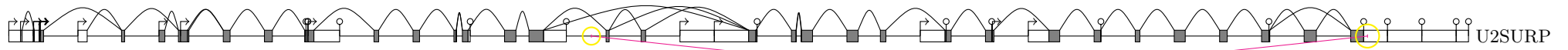
H. Sap	ctcctcag	gtaggttagctg...4702...atcaaaccagctgctgacac	AGCTGTTT	TTTTCTTGTTAAAT	tcagttcaatataaaggtag...200...ccttcgctgcag	acattggc
R. Mac	ctcctcag	gtaggttagcgg...4702...atcaaaccagctgctgacac	AGCTGTTT	TTTTCTTGTTAAAT	tcagttcaatataaaggtag...200...ccttcgctgcag	acattggc
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P. Abe	ctcctcag	gtaggttagctg...4702...atcaaaccagctgctgacac	AGCTGTTT	TTTTCTTGTTAAAT	tcagttcaatataaaggtag...200...ccttcgctgcag	acattggc
C. Jac	ctcctcag	gtaggttagccg...4702...atcaaaccagctgctgacac	AGCTGTTT	TTTTCTTGTTAAAT	tcagttcaatataaaggtag...200...ccttcgctgcag	acattggc
M. Mus	ttcctcag	gtaggttgccaa...4702...atcaaaccagctgctgacac	AGCTGTTT	TTTTCTTGTTAAAT	tcagttcaatataaaggtag...200...catccactgcag	acatcggc
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O. Cun	ctcctcag	gtacgtaggccg...4702...atcaaaccagctgctgacac	AGCTGTTT	TTTTCTTGTTAAAT	tcagttcaatataaaggtag...207...cctccgctgcag	acatgggc
F. Cat	ctcctcag	gtaggcccag...4704...atcaaaccagctgctgacac	AGCTGTTT	TTTTCTTGTTAAAT	tcagttcaatataaaggtag...198...cctccgctgcag	acctcggc
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id=414760 gene=ENSG00000198597 name=ZNF536 segment=chr19_30936640_31025753.1 type=IN

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R. Mac	acacacag	gtgagaagtctg...4711...atctacagccgttttcacat	GTTAGATAAAAGAAAAAGATAGCT	aattgtgtgtagatagtagt...191...aaaatcctgcag	gtgagaaa
P. Tro	acacacag	gtgagaagtctg...4711...atcgacagccgttttcacat	GTTAGATAAAAGAAAAAGATAGCT	aattgtgtgtagatagtagt...191...aaaatcctgcag	gtgagaaa
P. Abe	acacacag	gtgagaagtctg...4710...atctacagccgttttcacat	GTTAGATAAAAGAAAAAGATAGCT	aattgtgtgtagatagtagt...192...aaaatcctgcag	gtgagaaa
C. Jac	acacacag	gtgagaagtctg...4708...atctacagccgttttcacat	GTTAGATAAAAGAAAAAGATAGCT	aattgtgtgtagatagtagt...194...aaaatcctgcag	gtgagaaa
M. Mus	acacacag	gtgagagatc...4707...atctacagccgttttcacat	GTTAGATAAAAGAAAAAGATAGCT	aattgtgtgtagatagtagt...195...gatatcctgcag	gtgagaag
R. Nor	acacacag	gtgagagatg...4707...atctacagccgttttcacat	GTTAGATAAAAGAAAAAGATAGCT	aattgtgtgtagatagtagt...195...gctatcctgcag	gtgagaag
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L. Afr	acacacag	gtgagagactg...4705...atctacagccgttttcacat	GTTAGATAAAAGAAAAAGATAGCT	aattgtgtgtagatagtagt...197...caaatcctgcag	gtgagaaa
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id=414762 gene=ENSG00000198597 name=ZNF536 segment=chr19_31025907_31038849.1 type=IN VIEW

Figure 773:



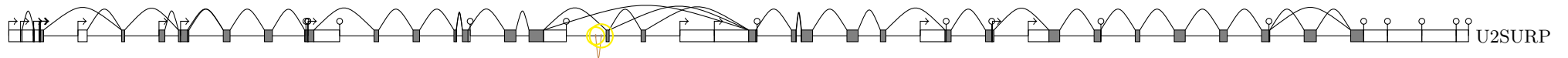
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R. Mac	tagaaatt	tcaatagaaag...314...	tgcattgatgtgcattctgg	CAGGAATGTTCT	gattc-tttgcatttagtgaa...	183...	cttcatatacag	actctgtc
P. Tro	gtgacatt	tcaatagaaag...319...	tgcattgatgtgcattctgg	CAGGAATGTTCT	gattc-tttgcatttggtgaa...	184...	cttcatatacag	actctgtc
P. Abe	gtgacatt	tcaatagaaag...319...	tgcattgatgtgcattctgg	CAGGAATGTTCT	gattc-tttgcatttggtgaa...	184...	cttcatatacag	actctgtc
C. Jac	gtgacatt	tcagtttagaaag...316...	tgcattgatgtgcattctgg	CAGGAATGTTCT	gattc-tttgcatttggtgaa...	184...	cttcatatacag	actctgtc
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R. Nor	gtgacttt	ttaattaagaaa...340...	tgcattgatgtgcattctag	CAGGAATGTTCT	gatgcttttgcatttggtgaa...	185...	cttcatatacag	actctgtc
C. Por	gtgacttt	tcagttttagaaag...325...	tgcattgatgtgcattctgg	CAGGAATGTTCT	gattc-tttgcatttggtgaa...	184...	cttcatatacag	actctgtc
O. Cun	agtgcatt	tcaattagactt...317...	tgcattgggtgtgcattctgg	CAGGAATGTTCT	gattc-tttgcatttagtgaa...	184...	cttcatatacag	actctgtc
C. Fam	gtgacttt	tcaatagaaaa...340...	tgcattgatgtgcattctgg	CAGGAATGTTCT	gattc-tttgcatttggtgaa...	186...	cttcatatacag	actctgtc
B. Tau	gtgccttt	tcaatagaaa...341...	tgcattgatgtgcattctgg	CAGGAATGTTCT	gattc-tttgcatttggtgaa...	184...	cttcatatacag	actctgtc
E. Cab	gtgacttt	tcaattagaata...340...	tgcattgatgtgcattctgg	CAGGAATGTTCT	gattc-tttgcatttggtgaa...	180...	cttcatatacag	actctgtc
O. Avi	gtgccttt	tcgattagaaag...332...	tgcattgatgtgcattctgg	CAGGAATGTTCT	gattc-tttgcatttggtgaa...	184...	cttcatatacag	actctgtc
L. Afr	gtgacttt	tcaattaggaag...341...	tgcattgatgtgcattctgg	CAGGAATGTTCT	gattc-tttgcatttggtgaa...	184...	cttcatatacag	actctgtc
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R. Mac	gttttgtg	cctgaacggctgtgtttttt	-----aaaaaac-----aaaaac-----	-----aaaaaatcaaatgaa	AGAGCATTCCTG	ggg-tttttgtttgtttgtt-	...258..	agaaaactataa	tgttgttt
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P. Abe	gttttgtg	cctgaatggctgtgtttttt	-----aaaaaac-----aaaaac-----	-----aaaaaatcaaatgaa	AGAGCATTCCTG	ggg-tttttgtttgtttgtt-	...264..	agaaaactataa	tgttgttt
C. Jac	gttttgtg	cctgaatggctgtgtttttt	-----aaaaaac-----aaaaac-----	-----aaaaaatcaaatgaa	AGAGCATTCCTG	ggg-tttttgtttgtttgtt-	...262..	agaaaactataa	tgttgttt
M. Mus	gttttgtg	tctgaatggtttttttttcttatt	-----aaaaa-----aaaaaccatacacacaaaaacaa	-----aaaaattctaatagaa	AGAGCATTCCTG	gggtttttgtttgtttgtt-	...268..	agaaaactataa	tgttgttt
R. Nor	gttttgtg	cctgaatggttttttttttgtttttt	-----aaaaaac-----aaaaaccatacacacaaaaaca	-----aaaaaatcctaatagaa	AGAGCATTCCTG	gggtttttgtttgtttgtt-	...265..	agaaaactataa	tgttgttt
C. Por	tgtttgtg	cctgaatggctgtgtttttt	-----aaaaaac-----aaaaca-----	-----aaaacatcaaatgaa	AGAGCATTCCTG	gggtttttttttgtttgtt-	...269..	agaaaactataa	tgttgttt
O. Cun	gttttgtg	cctgaatggctgtgtttttt	-----aaaaaac-----aaaaca-----	-----aaaaaatcaaatgaa	AGAGCATTCCTG	ggg-tttttgtttgtttgtg-	...258..	agaaaactataa	tgttgttt
C. Fam	gttttgtg	cctgaatggctgtgttttttttttttttttttaaaaaaacac	-----aaaaaac-----aaaaaac	-----aaaaaatcaaatgaa	AGAGCATTCCTG	ggg-tttttgtttgtttgtt-	...263..	agaaaactataa	tgttgttt
B. Tau	gttttgtg	cctgaatggctgtgtttttt	-----taaaaaaacg-----aaaaac-----	-----aaaaaatcctaatagaa	AGAGCATTCCTG	gggtttttattgtttgtg-	...259..	agaaaactataa	tgttgttt
E. Cab	gttttgtg	cctgaacggctgtgtttttt	-----taaaaaaacg-----aaaaac-----	-----aaaaaatcaaatgaa	AGAGCATTCCTG	gggtttttgtttattgtt-	...263..	agaaaactataa	tgttgttt
O. Avi	gttttgtg	cctgaacggctgtgtttttt	-----taaaaaaacg-----aaaaac-----	-----aaaaaatcctaatagaa	AGAGCATTCCTG	gggtttttattgtttgtg-	...258..	agaaaactataa	tgttgttt
L. Afr	gttttgtg	cctgaacagctgtgtttttt	-----aaaaaac-----aaaaaac	-----aaaaaacctca-	AGAGCATTCCTG	gggtttttgtttgtttgtt-	...266..	agaaaactataa	tgttgttt
	*****	*****	**	*****	*****	**	*****	*****	*****

id=347253 gene=ENSG00000163714 name=U2SURP segment=chr3_142775343_142775688.1 type=E3 VIEW

Figure 774:



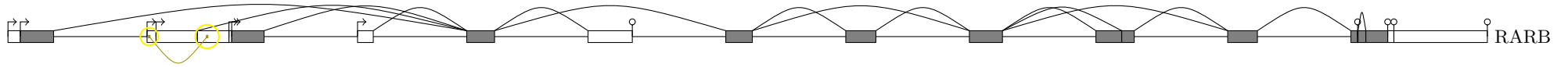
H. Sap	gtgacatt	tcaattagaaag...379...	gttcact--gaacacatccatt	TGCAtt	TATGTAATTG	ccttagtgtataatgacttca...	120...	cttcataacag	actctgtc
R. Mac	tagaaatt	tcaattagaaag...373...	gttcact--gaacacatccatt	TGCAtt	TATGTAATTG	ccttagtgtataatgacttca...	120...	cttcataacag	actctgtc
P. Tro	gtgacatt	tcaattagaaag...379...	gttcact--gaacacatccatt	TGCAtt	TATGTAATTG	ccttagtgtataatgacttca...	120...	cttcataacag	actctgtc
P. Abe	gtgacatt	tcaattagaaag...379...	gttcact--gaacacatccatt	TGCAtt	TATGTAATTG	ccttagtgtataatgacttca...	120...	cttcataacag	actctgtc
C. Jac	gtgacatt	tcagttagaaag...376...	gttcact--gaacacatccatt	TGCAtt	TATGTAATTG	ccttagtgtataatgacttca...	120...	cttcataacag	actctgtc
M. Mus	gtgacttt	tcaattaagaaa...399...	-tcactgtgaacacatccatt	TGCAtt	TATGTAATTG	ccttagtgtataatgacttca...	120...	cttcataacag	actctgtc
R. Nor	gtgacttt	ttaattaagaaa...402...	-ttcgtgtgaacacat-catt	TGCAtt	TATGTAATTG	ccttagtgtataatgacttca...	119...	cttcataacag	actctgtc
C. Por	gtgacttt	tcagtttgaaag...385...	gttcact--gaacacatccatt	TGCAtt	TATGTAATTG	ccttagtgtataatgacttca...	121...	cttcataacag	actctgtc
O. Cun	agtgcatt	tcaattagactt...377...	gttcact--gaacacatccatt	TGCAtt	TATGTAATTG	ccttagtgtataatgacttca...	120...	cttcataacag	actctgtc
B. Tau	gtgccttt	tcaattagaaag...401...	gttcact--gaaacatccatc	TGCAtt	TATGTAATTG	ccttagtgtataatgacttca...	120...	cttcataacag	actctgtc
E. Cab	gtgacttt	tcaattagaata...400...	gttcact--gaacacatccatt	TGCAtt	TATGTAATTG	ccttagtgtataatgacttca...	116...	cttcataacag	actctgtc
S. Sus	gtaccttt	tcaattagaaag...421...	gttcact--gaacacatccatt	TGCAtt	TATGTAATTG	ccttagtgtataatgacttca...	120...	cttcataacag	actctgtc
O. Avi	gtgccttt	tcgattagaaag...392...	gttcact--gaacacatccatt	TGCAtt	TATGTAATTG	ccttagtgtataatgacttca...	120...	cttcataacag	actctgtc
L. Afr	gtgacttt	tcaattaggaag...401...	gttcact--gaacacatccatt	TGCAtt	TATGTAATTG	ccttagtgtataatgacttca...	120...	cttcataacag	actctgtc
		** * *	** * *	** * *	** * *	** * *	** * *	** * *	** * *

id=347207 gene=ENSG00000163714 name=U2SURP segment=chr3_142742238_142742816.1 type=IN

H. Sap	gtgacatt	tcaattagaaag...462...	gattagatatgtagtatttt	CAATGCATATGTA	tatattttgcttggttacttgt...	40...	cttcataacag	actctgtc
R. Mac	tagaaatt	tcaattagaaag...456...	gattagatatgtagtatttt	CAATGCATATGTA	tatattttgcttggttacttgt...	40...	cttcataacag	actctgtc
P. Tro	gtgacatt	tcaattagaaag...462...	gattagatatgtagtatttt	CAATGCATATGTA	tatattttgcttggttacttgt...	40...	cttcataacag	actctgtc
P. Abe	gtgacatt	tcaattagaaag...462...	gattagatatgtagtatttt	CAATGCATATGTA	tatattttgcttggttacttgt...	40...	cttcataacag	actctgtc
C. Jac	gtgacatt	tcagttagaaag...459...	gattagatatgtagtatttt	CAATGCATATGTA	tatattttgcttggttacttgt...	40...	cttcataacag	actctgtc
M. Mus	gtgacttt	tcaattaagaaa...481...	gattagatgtgtagtgtttt	CAATGCATATGTA	tatattttgcttggttacttgt...	40...	cttcataacag	actctgtc
R. Nor	gtgacttt	ttaattaagaaa...484...	gattagatgtgtagtgtttt	CAATGCATATGTA	tatattttgcttggttacttgt...	40...	cttcataacag	actctgtc
C. Por	gtgacttt	tcagtttgaaag...468...	gattagatgtgtagtatttt	CAATGCATATGTA	tatattttgcttggttacttgt...	40...	cttcataacag	actctgtc
O. Cun	agtgcatt	tcaattagactt...460...	gattagatgtgtagtatttt	CAATGCATATGTA	tatattttgcttggttacttgt...	40...	cttcataacag	actctgtc
B. Tau	gtgccttt	tcaattagaaag...484...	gattagttgtgtagtatttt	CAATGCATATGTA	tatattttgcttggttacttgt...	40...	cttcataacag	actctgtc
E. Cab	gtgacttt	tcaattagaata...479...	gattagatgtgtagtatttt	CAATGCATATGTA	tatattttgcttggttacttgt...	40...	cttcataacag	actctgtc
S. Sus	gtaccttt	tcaattagaaag...504...	gattagatgtgtagtatttt	CAATGCATATGTA	tatattttgcttggttacttgt...	40...	cttcataacag	actctgtc
O. Avi	gtgccttt	tcgattagaaag...475...	gattagttgtgtagtatttt	CAATGCATATGTA	tatattttgcttggttacttgt...	40...	cttcataacag	actctgtc
L. Afr	gtgacttt	tcaattaggaag...484...	gattagatgtgtagtatttt	CAATGCATATGTA	tatattttgcttggttacttgt...	40...	cttcataacag	actctgtc
		** * *	** * *	** * *	** * *	** * *	** * *	** * *

id=347207 gene=ENSG00000163714 name=U2SURP segment=chr3_142742238_142742816.1 type=IN VIEW

Figure 775:



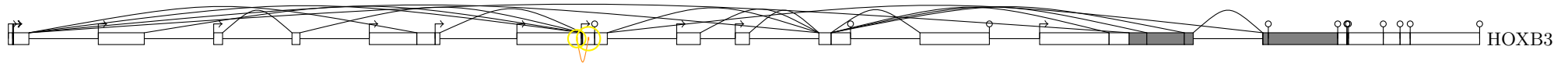
H.Sap	cattcTGT	GtgACAGAAGT	agtaggaagt	gagctgttcagaggcaggagggtctat	tctttgcc
R.Mac	cattcTGT	GtgACAGAAGT	agtaggaagt	gagctgttcagaggcaggagggtctat	tctttgcc
P.Tro	cattcTGT	GtgACAGAAGT	agtaggaagt	gagctgttcagaggcaggagggtctat	tctttgcc
P.Abe	cattcTGT	GtgACAGAAGT	agtaggaagt	gagctgttcagaggcaggagggtctat	tctttgcc
C.Jac	cattcTGT	GtgACAGAAGT	agtaggaagt	gagctgttcagaggcaggagggtctat	tctttgcc
M.Mus	cattccgT	GTGACAGAAGT	gtaggaagt	gagctgctccgaggcaggagggtctat	tctttgcc
C.Por	cattcTGT	GtgACAGAAGT	agtaggaagt	gagctgttcagaggcaggagggtctat	tctttgcc
O.Cun	cattcTGT	GtgACAGAAGT	agtaggaagt	gggctgttcggaggcaggagggtctat	tctttgcc
C.Fam	cattcTGT	GtgACAGAAGT	agtaggaagt	gagctgttcagaggcaggagggtctat	tctctgcc
F.Cat	cattcTGT	GtgACAGAAGT	agtaggaagt	gagctgttcagaggcaggagggtctat	tctttgcc
B.Tau	cattcTGT	GtgACAGAAGT	agtaggaagt	gagctgttcagaggcaggagggtctat	tctttgcc
E.Cab	cattcTGT	GtgACAGAAGT	agtaggaagt	gagctgttcagaggcaggagggtctat	tctttgcc
S.Sus	cattcTGT	GtgACAGAAGT	agtaggaagt	gagctgttcggaggcaggagggtctat	tctttgcc
L.Afr	cattcTGT	GtgACAGAAGT	agtaggaagt	gagctgttcagaggcaggagggtctat	tctttgcc
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id=418387 gene=ENSG0000077092 name=RARB segment=chr3_25469754_25469801.1 type=AN

H.Sap	ggaaaatg	gtaaatgatcatttggatcaattacaggcttttagctg	GCTTgtCTGTCATA	attcatgattcggggctggg...85...tagaggataaagc	acttttgc
R.Mac	ggaaaatg	gtaaatgatcatttggatcaattacaggcttttagctg	GCTTgtCTGTCATA	attcatgattcggggctggg...85...tagaggataaagc	acttttgc
P.Tro	ggaaaatg	gtaaatgatcatttggatcaattacaggcttttagctg	GCTTgtCTGTCATA	attcatgattcggggctggg...85...tagaggataaagc	acttttgc
P.Abe	ggaaaatg	gtaaatgatcatttggatcaattacaggcttttagctg	GCTTgtCTGTCATA	attcatgattcggggctggg...85...tagaggataaagc	acttttgc
C.Jac	ggaaaatg	gtaaatgatcatttggatcaattacaggcttttagctg	GCTTgtCTGTCATA	attcatgattcggggctggg...85...tagaggataaagc	acttttgc
M.Mus	ggaaaatg	gtaaatgatcatttggatcaattacaggcttttagctg	GCTTgtCTGTCATA	attcatgattcggggctggg...84...tagaggataaagc	acttttgc
C.Por	ggaaaatg	gtaaatgatcatttggatcaattacaggcttttagctg	GCTTgtCTGTCATA	attcatgattcggggctggg...85...tagaggataaagc	acttttgc
O.Cun	ggaaaatg	gtaaatgatcatttggatcaattacaggcttttagctg	GCTTgtCTGTCATA	attcatgattcggggctggg...85...tagaggataaagc	actttcac
C.Fam	ggaaaatg	gtaaatgatcatttggatcaattacaggcttttagctg	GCTTgtCTGTCATA	attcatgattcggggctggg...85...tagaggataaagc	acttttgc
F.Cat	ggaaaatg	gtaaatgatcatttggatcaattacaggcttttagctg	GCTTgtCTGTCATA	attcatgattcggggctggg...85...tagaggataaagc	acttttgc
B.Tau	ggaaaatg	gtaaatgatcatttggatcaattacaggcttttagctg	GCTTgtCTGTCATA	attcatgattcggggctggg...85...tagaggataaagc	acttttgc
E.Cab	ggaaaatg	gtaaatgatcatttggatcaattacaggcttttagctg	GCTTgtCTGTCATA	attcatgattcggggctggg...85...tagaggataaagc	acttttgc
S.Sus	ggaaaatg	gtaaatgatcatttggatcaattacaggcttttagctg	GCTTgtCTGTCATA	attcatgattcaggctggg...85...tagaggataaagc	acttttgc
L.Afr	ggaaaatg	gtaaatgaccatttggatcaattacaggcttttagctg	GCTTgtCTGTCATA	attcatgattcggggctggg...85...tagaggataaagc	acttttgc
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id=418389 gene=ENSG0000077092 name=RARB segment=chr3_25470023_25470191.1 type=AN VIEW

Figure 776:



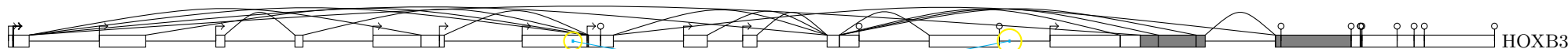
H.Sap	gttattta	ttttgcatcct...385..gagaattatacagaaaacca	TTAA	CACTT	TTTTCTTT	AAATA	cgatcctctctcctttgttatt	attcaaca
R.Mac	gttattta	ttttgcatcct...385..gagaattatacagaaaacca	TTAA	CACTT	TTTTCTTT	AAATA	cgatcctctctcctttgttatt	attcaaca
P.Tro	gttattta	ttttgcatcct...386..gagaattatacagaaaacca	TTAA	CACTT	TTTTCTTT	AAATA	cgatcctctctcctttgttatt	attcaaca
P.Abe	gttattta	ttttgcatcct...389..gagaattatacagaaaacca	TTAA	CACTT	TTTTCTTT	AAATA	cgatcctctctcctttgttatt	attcaaca
C.Jac	gttattta	ttttgcatcct...387..gagaattatacagaaaacca	TTAA	CACTT	TTTTCTTT	AAATA	cgatcctctctcctttgttatt	attcaaca
M.Mus	gttgttta	ttttacgtttct...441..gagaattatacagaaaacca	TTAA	CACTT	TTTTCTTT	AAATA	cgatcctctctcctttgtcatt	attcaaca
R.Nor	gttgttta	tcttacatttct...411..gagaattatacagaaaacca	TTAA	CACTT	TTTTCTTT	AAATA	cgatcctctctcctttgtcatt	attcaaca
C.Por	gttattta	ttttgcatcct...389..gagaattatacagaaaacca	TTAA	CACTT	TTTTCTTT	AAATA	cgatcctctctcctttgttatt	attcaaca
C.Fam	gttatttc	ttttgtattcct...392..gagaattatacagaaaacca	TTAA	CACTT	TTTTCTTT	AAATA	cgatcctctctcctttgttatt	attcaaca
F.Cat	gttatttc	ttttgtattcct...377..gagaattatacagaaaacca	TTAA	CACTT	TTTTCTTT	AAATA	cgatcctctctcctttgttatt	attcaaca
B.Tau	gttatttc	ttttgcatcct...391..gagaattatacagaaaacca	TTAA	CACTT	TTTTCTTT	AAATA	cgatcctctctcctttgttatt	attcaaca
E.Cab	gttatttc	ttttgtgttct...382..gagaattatacagaaaacca	TTAA	CACTT	TTTTCTTT	AAATA	cgatcctctctcctttgttatt	attcaaca
S.Sus	gttatttc	ttttgcatcct...374..gagaattatacagaaaacca	TTAA	CACTT	TTTTCTTT	AAATA	cgatcctctctcctttgttatt	attcaaca
L.Afr	ttgattta	ctttttatgcct...355..gagaattatacagaaaacca	TTAA	CACTT	TTTTCTTT	AAATA	cgatcctctctcctttgttatt	attcaaca
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id=553412 gene=ENSG00000120093 name=HOXB3 segment=chr17.46651386.46651849_-1 type=AN

H.Sap	ttcaacag	caaatctccttgaccggc	TGTTg	GGGGAAAAAAGTGTAG	ccgtctctcccggatctgcaagggg	aaaaatttgaaccataaa	gttgaaaa
R.Mac	ttcaacag	caaatctcctcagaccggc	TGTTg	GGGGAAAAAAGTGTAG	ccgtctctcccggatctgcaagggg	aaaaatttgaaccataaa	gttgaaaa
P.Tro	ttcaacag	caaatctccttgaccggc	TGTTg	GGGGAAAAAAGTGTAG	ccgtctctcccggatctgcaagggg	aaaaatttgaaccataaa	gttgaaaa
P.Abe	ttcaacag	caaatctcctcagaccggc	TGTTg	GGGGAAAAAAGTGTAG	ccgtctctcccggatctgcaagggg	aaaaatttgaaccataaa	gttgaaaa
C.Jac	ttcaacag	caaatctcctcagaccggc	TGTTg	GGGGAAAAAAGTGTAG	ccgtctctcccggatctgcaagggg	aaaaatttgaaccataaa	gttgaaaa
M.Mus	ttcaacag	caaatctcgcagaccggc	TGTTg	GGGGAAAAAAGTGTAG	ccgtctct-cggatcggcaagggg	aaaaatttggagccataaa	gttgaaaa
R.Nor	ttcaacag	caaatctccacagaccggc	TGTTg	GGGGAAAAAAGTGTAG	ccgcctctcccggatctgcaagggg	aaaaatttggagccataaa	gttgaaaa
C.Por	ttcaacag	caaatctccgcagaccggc	TGTTg	GGGGAAAAAAGTGTAG	ccggctctcccggatctgcaagggg	aaaaatttgaaccctaaa	gttgagaa
C.Fam	ttcaacag	caaatctcgcagaccggc	TGTTg	GGGGAAAAAAGTGTAG	ctggctctcccggatctgcaagggg	aaaaatttgaaccataaa	gttgaaaa
F.Cat	ttcaacag	caaatctcgcagaccggc	TGTTg	GGGGAAAAAAGTGTAG	ctggctctcccggatctgcaagggg	aaaaatttgaaccataaa	gttgaaaa
B.Tau	ttcaacag	caaatctcgcagaccggc	TGTTg	GGGGAAAAAAGTGTAG	ccgcaactcccggatctgcaagggg	aaaaatttgaaccataaa	gttgaaaa
E.Cab	ttcaacag	caaatctcgcagaccggc	TGTTg	GGGGAAAAAAGTGTAG	ccgtctctcccggatctgcaagggg	aaaaatttgaaccataaa	gttgaaaa
S.Sus	ttcaacag	caaatctcgcagaccggc	TGTTg	GGGGAAAAAAGTGTAG	ccgcaactcccggatctgcaagggg	aaaaatttgaaccataaa	gttgaaaa
L.Afr	ttcaacag	caaatctcgcagaccggc	TGTTg	GGGGAAAAAAGTGTAG	ccatctctcccggatctgcaagggg	caaaaatttggagccataaa	gttgaaaa
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id=553414 gene=ENSG00000120093 name=HOXB3 segment=chr17.46651290.46651376_-1 type=AN VIEW

Figure 777: CS=4.2



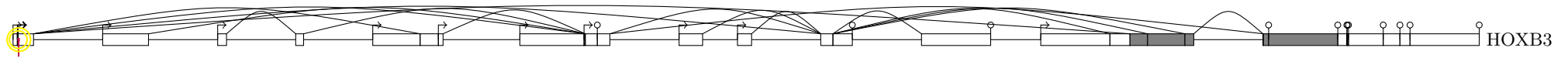
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R.Mac	gttattta	ttttgcattcct...314...ttaaaaaaaaaagatttctat	GGAGcTTAAAGTTcACAG	ccattctgtgt-agacaagag...68...tcctttgttatt	attcaaca
P.Tro	gttattta	ttttgcattcct...315...aaaaaaaaaagatttctat	GGAGcTTAAAGTTcACAG	ccattctgtgt-agacaagag...68...tcctttgttatt	attcaaca
P.Abe	gttattta	ttttgcattcct...318...aaaaaaagagatttctat	GGAGcTTAAAGTTcACAG	ccattctgtgt-agacaagag...68...tcctttgttatt	attcaaca
C.Jac	gttattta	ttttgcattcct...316...aaagaaaaaagatttctat	GGAGcTTAAAGTTcACAG	ccattctgtgc-agacaagag...68...tcctttgttatt	attcaaca
C.Por	gttattta	ttttgcattcct...318...taaaaaaaaaagatttctat	GGAGcTTAAAGTTcACAG	ccattctgtgt-agacaagag...68...tcctttgttatt	attcaaca
O.Cun	gttattta	ttttgcattcct...333...aaaaaaaaaagatttctat	GGAGcTTAAAGTTcACAG	tcattctgtgtaagacaaga...69...tcctttgttatt	attcaaca
C.Fam	gttatttc	ttttgtattcct...321...aataaaaaaagatttctat	GGAGcTTAAAGTTcACAG	ccattctgtgt-agacaagag...68...tcctttgttatt	attcaaca
F.Cat	gttatttc	ttttgtattcct...306...aataaaaaaagatttctat	GGAGcTTAAAGTTcACAG	ccattctgtgt-agacaagag...68...tcctttgttatt	attcaaca
B.Tau	gttatttc	ttttgcatttct...320...aataaaaaaagatttctat	GGAGcTTAAAGTTcACAG	ccattctgtgt-agacaagag...68...tcctttgttatt	attcaaca
E.Cab	gttatttc	ttttgtgttct...311...agaattaaaaaagatttctat	GGAGcTTAAAGTTcACAG	ccattctgtgt-agacaagag...68...tcctttgttatt	attcaaca
S.Sus	gttatttc	ttttgcattcct...303...attaaaaaagatttctat	GGAGcTTAAAGTTcACAG	ccattctgtgt-agacaagag...68...tcctttgttatt	attcaaca
L.Afr	ttgattta	ctttttatgcct...284...aaaaaaaaaagatttctat	GGAGcTTAAAGTTcACAG	ccattctgtgt-agacaagag...68...tcctttgttatt	attcaaca
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id=553412 gene=ENSG00000120093 name=HOXB3 segment=chr17_46651386.46651849_-1 type=AN

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R.Mac	ccagccaa	ccccctccaacgtttttatttcattctct---tctctattaataacaaccacaactaatgc	CTGTtAATTAATTCC	-cccttcagccagggctgctc...256...ttagttttattt-----	ggagttga--
P.Tro	ccagccaa	ccccctccaacgtttttatttcattctct---tctctattaataacaaccacaactaatgc	CTGTtAATTAATTCC	-cccttcagccagggctgctt...256...ttagttttcttt-----	ggagttga--
P.Abe	ccagccaa	ccccctccaacgtttttatttcattctct---tctctattaataacaaccacaactaatgc	CTGTtAATTAATTCC	-cccttcagccagggctgctc...261...-----tctctaactaaa	ggagttga--
C.Jac	ccagccaa	ccccctccaacgtttttatttcattctct---tctctattaataacaaccacaactaatgc	CTGTtAATTAATTCC	-cccttcagccagggcctgctc...260...ttagttttcttt-----	ggagttga--
C.Por	ccagctaa	cccc-tccaaggtttttatttcattctc-----tatctattaataacaactcaactgatgc	CTGTtAATTAATTCC	-cccttcagccagggcactt...282...tcagtgtccttt-----	ggagttga--
O.Cun	ccagccaa	ccccctctaactgtttttatttcattctct---tctctattaataacaactcaactgatgc	CTGTtAATTAATTCC	-cccttcagccagggctgctc...262...tcagtgtccttt-----	--ggtcgacc
C.Fam	ccagccaa	ccccctccaacgtttttatttcattctcttctctatctattaataacaactcaactgatgc	CTGTtAATTAATTCC	-cccttcagccagggctgctc...272...tgagttttcttt-----	ggagttga--
F.Cat	ccagccaa	ccccctccaacgtttttatttcattctct---tctctattaataacaactcaactgatgc	CTGTtAATTAATTCC	-cccttcagccagggctgctc...275...ttagttttcttt-----	ggggttga--
B.Tau	ccagccaa	ccccctccaacgtttttatttcattctct---tatctattaataacaactcaactgatgc	CTGTtAATTAATTCC	-cccttcagccagggctgctc...273...ttagttttcttt-----	ggagttga--
E.Cab	ccagccaa	ccccctccaacgtttttatttcattctctc---tttctattaataacaactcaactgatgc	CTGTtAATTAATTCC	-cccttcagccagggctgctc...277...ctagttttcttt-----	ggagttaa--
S.Sus	ccagccaa	ccccctccaacgtttttatttcattctctctctgtctattaataacaactcaactgatgc	CTGTtAATTAATTCC	-cccttcagccagggctgctc...269...ttagttttcttt-----	ggaattga--
L.Afr	ccagccaa	ccccctccaacgtttttatttcattctcttctctatctattaataacaactcaactgatgc	CTGTtAATTAATTCC	-cccttcagccagggctgctt...274...ttagttttcttt-----	gaagttga--
	**** *	*** ** * *****	* *****	** ** * ** *	* *

id=553425 gene=ENSG00000120093 name=HOXB3 segment=chr17_46631285.46631646_-1 type=IN VIEW

Figure 778: CS=3.9



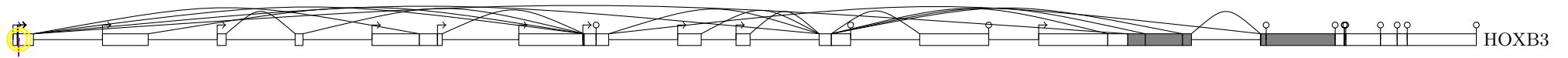
H.Sap	caccgcgc	agtatatttcacattctccagaat	GTTAAGT	GaCACTTt
R.Mac	caccgcgc	agtatatttcacattctccagaat	GTTAAGT	GaCACTTt
P.Tro	caccgcgc	agtatatttcacattctccagaat	GTTAAGT	GaCACTTt
P.Abe	caccgcgc	agtatatttcacattctccagaat	GTTAAGT	GaCACTTt
M.Mus	caccgcgc	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
R.Nor	caccgcgc	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
C.Por	cactgtgc	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
O.Cun	cactgtgc	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
C.Fam	caccgcgc	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
F.Cat	caccgcgc	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
B.Tau	caccgcgc	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
E.Cab	caccgcgc	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
O.Avi	caccgcgc	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
L.Afr	caccgtgc	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
	*** * **	*****	*****	*****

id=553397 gene=ENSG00000120093 name=HOXB3 segment=chr17.46667604.46667634.-1 type=E5

H.Sap	tAAGT	GaC	ACTt	TAACtgc
R.Mac	tAAGT	GaC	ACTt	TAACtgc
P.Tro	tAAGT	GaC	ACTt	TAACtgc
P.Abe	tAAGT	GaC	ACTt	TAACtgc
M.Mus	tAAGT	GaC	ACTt	TAACtgc
R.Nor	tAAGT	GaC	ACTt	TAACtgc
C.Por	tAAGT	GaC	ACTt	TAACtgc
O.Cun	tAAGT	GaC	ACTt	TAACtgc
C.Fam	tAAGT	GaC	ACTt	TAACtgc
F.Cat	tAAGT	GaC	ACTt	TAACtgc
B.Tau	tAAGT	GaC	ACTt	TAACtgc
E.Cab	tAAGT	GaC	ACTt	TAACtgc
O.Avi	tAAGT	GaC	ACTt	TAACtgc
L.Afr	tAAGT	GaC	ACTt	TAACtgc
	****	***	*****	*****

id=553399 gene=ENSG00000120093 name=HOXB3 segment=chr17.46667598.46667600.-1 type=E5 VIEW

Figure 779:



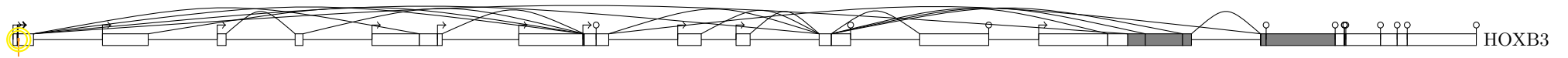
H.Sap	caccgcg	agtatatttcacattctccagaat	GTTAAGT	GaCACTTt
R.Mac	caccgcg	agtatatttcacattctccagaat	GTTAAGT	GaCACTTt
P.Tro	caccgcg	agtatatttcacattctccagaat	GTTAAGT	GaCACTTt
P.Abe	caccgcg	agtatatttcacattctccagaat	GTTAAGT	GaCACTTt
M.Mus	caccgcg	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
R.Nor	caccgcg	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
C.Por	cactgtgc	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
O.Cun	cactgvc	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
C.Fam	caccgcg	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
F.Cat	caccgcg	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
B.Tau	caccgcg	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
E.Cab	caccgcg	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
O.Avi	caccgcg	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
L.Afr	caccgtgc	ggtatatttcacattctccagaat	GTTAAGT	GaCACTTt
	*** * **	*****	*****	*****

id=553397 gene=ENSG00000120093 name=HOXB3 segment=chr17.46667604.46667634.-1 type=E5

H.Sap	tgttAAGT	GaCACTtTAAc
R.Mac	tgttAAGT	GaCACTtTAAc
P.Tro	tgttAAGT	GaCACTtTAAc
P.Abe	tgttAAGT	GaCACTtTAAc
M.Mus	tgttAAGT	GaCACTtTAAc
R.Nor	tgttAAGT	GaCACTtTAAc
C.Por	tgttAAGT	GaCACTtTAAc
O.Cun	tgttAAGT	GaCACTtTAAc
C.Fam	tgttAAGT	GaCACTtTAAc
F.Cat	tgttAAGT	GaCACTtTAAc
B.Tau	tgttAAGT	GaCACTtTAAc
E.Cab	tgttAAGT	GaCACTtTAAc
O.Avi	tgttAAGT	GaCACTtTAAc
L.Afr	tgttAAGT	GaCACTtTAAc
	*****	*****

id=553398 gene=ENSG00000120093 name=HOXB3 segment=chr17.46667601.46667603.-1 type=E5 VIEW

Figure 780:



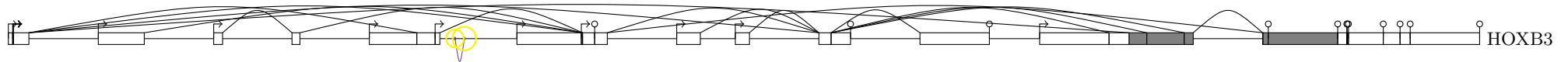
H.Sap	tGTTAAGT	GaCACTT	taac
R.Mac	tGTTAAGT	GaCACTT	taac
P.Tro	tGTTAAGT	GaCACTT	taac
P.Abe	tGTTAAGT	GaCACTT	taac
M.Mus	tGTTAAGT	GaCACTT	taac
R.Nor	tGTTAAGT	GaCACTT	taac
C.Por	tGTTAAGT	GaCACTT	taac
O.Cun	tGTTAAGT	GaCACTT	taac
C.Fam	tGTTAAGT	GaCACTT	taac
F.Cat	tGTTAAGT	GaCACTT	taac
B.Tau	tGTTAAGT	GaCACTT	taac
E.Cab	tGTTAAGT	GaCACTT	taac
O.Avi	tGTTAAGT	GaCACTT	taac
L.Afr	tGTTAAGT	GaCACTT	taac
*****	*****	*****	*****

id=553398 gene=ENSG00000120093 name=HOXB3 segment=chr17.46667601.46667603.-1 type=E5

H.Sap	tAAGT	GaC	ACTtTAACtgc
R.Mac	tAAGT	GaC	ACTtTAACtgc
P.Tro	tAAGT	GaC	ACTtTAACtgc
P.Abe	tAAGT	GaC	ACTtTAACtgc
M.Mus	tAAGT	GaC	ACTtTAACtgc
R.Nor	tAAGT	GaC	ACTtTAACtgc
C.Por	tAAGT	GaC	ACTtTAACtgc
O.Cun	tAAGT	GaC	ACTtTAACtgc
C.Fam	tAAGT	GaC	ACTtTAACtgc
F.Cat	tAAGT	GaC	ACTtTAACtgc
B.Tau	tAAGT	GaC	ACTtTAACtgc
E.Cab	tAAGT	GaC	ACTtTAACtgc
O.Avi	tAAGT	GaC	ACTtTAACtgc
L.Afr	tAAGT	GaC	ACTtTAACtgc
****	***	*****	*****

id=553399 gene=ENSG00000120093 name=HOXB3 segment=chr17.46667598.46667600.-1 type=E5 VIEW

Figure 781:



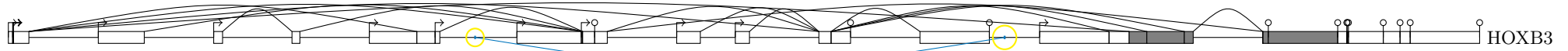
H. Sap	ataagaag	gtatcgctttcc...63...	gttttcagagtat	ttttata	TTACAAAGGAGCTA	gccagtgccatagct	caaac...414...	tattgttatta	ttttgcat
R. Mac	ataagaag	gtatcgctttcc...63...	gttttcagagtat	ttttata	TTACAAAGGAGCTA	gccagtgccatagct	caaac...417...	tattgttatta	ttttgcat
P. Tro	ataagaag	gtatcgctttcc...63...	gttttcagagtat	ttttata	TTACAAAGGAGCTA	gccagtgccatagct	caaac...414...	tattgttatta	ttttgcat
P. Abe	ataagaag	gtatcgctttcc...63...	gttttcagagtat	ttttata	TTACAAAGGAGCTA	gccagtgccatagct	caaac...413...	tattgttatta	ttttgcat
C. Jac	ataagaag	gtattgctttcc...63...	gttttcagagtat	ttttata	TTACAAAGGAGCTA	gtcggtgccatagct	caaac...418...	tgtgttatta	ttttgcat
C. Por	ctacgaag	gtaccgctttcc...63...	gttttcagagtat	ttttata	TTACAAAAGAGCTA	gccggtgccatagct	caaac...411...	tatggttatta	ttttgcat
O. Cun	gcaagaag	gtatcactttcc...64...	gttttcagagtat	ttttata	TTACAAAGGAGCTA	gccggtgccatagct	caaac...411...	tattgttttta	ttttgcat
C. Fam	ctaagaag	gtatcgctttcc...63...	gttttcagagtat	ttttata	TTACAAAGGAGCTA	gccggtgccatagct	caaac...419...	tctgttatttc	ttttgcat
F. Cat	ctaagaag	gtatcgctttcc...63...	gttttcagagtat	ttttata	TTACAAAGGAGCTA	gccggtgccatagct	caaac...415...	tactgttatttc	ttttgcat
B. Tau	gtaagaag	gtatccttttcc...63...	gttttcagagtat	ttttata	TTACAAAGGAGCTA	gccagtgccatagct	caaac...404...	tactgttatttc	ttttgcat
E. Cab	gtaagaag	gtactgttttcc...63...	gttttcagagtat	ttttata	TTACAAAGGAGCTA	gccgatgccatagct	caaac...396...	tattgttatttc	ttttgcat
S. Sus	gtaagaag	gtatcgctttcc...63...	gttttcagagtat	ttttata	TTACAAAGGAGCTA	gccggtgccatagct	caaac...424...	tactgttatttc	ttttgcat
O. Avi	gtaagaag	gtatccttttcc...63...	gttttcagagtat	ttttata	TTACAAAGGAGCTA	gccggtgccatagct	caaac...396...	tactgttatttc	ttttgcat
L. Afr	ataagaag	gtaccgctttcc...63...	gttttcagagtat	ttttata	TTACAAAGGAGCTA	gctggtgccatagct	caagc...409...	tatttggattta	ctttttat
		* **	*** ** *	*****	*****	*****	*	* **	*** *

id=553411 gene=ENSG00000120093 name=HOXB3 segment=chr17.46651850.46652404.-1 type=IN

H. Sap	ataagaag	gtatcgctttcc...130...	tagataatcaagaagacaaa	TGGC	TCTTTTGTGA	agccttgctccagtattaat...	346...	tattgttatta	ttttgcat
R. Mac	ataagaag	gtatcgctttcc...130...	tagataatcaagaagacaaa	TGGC	TCTTTTGTGA	agccttgctccagtattaat...	349...	tattgttatta	ttttgcat
P. Tro	ataagaag	gtatcgctttcc...130...	tagataatcaagaagacaaa	TGGC	TCTTTTGTGA	agccttgctccagtattaat...	346...	tattgttatta	ttttgcat
P. Abe	ataagaag	gtatcgctttcc...130...	tagataatcaagaagacaaa	TGGC	TCTTTTGTGA	agccttgctccagtattaat...	345...	tattgttatta	ttttgcat
C. Jac	ataagaag	gtatcgctttcc...130...	tagataatcaagaagacaaa	TGGC	TCTTTTGTGA	agccttgctccagtattaat...	350...	tgtgttatta	ttttgcat
C. Por	ctacgaag	gtaccgctttcc...130...	tagataatcaagaagacaaa	TGGC	TCTTTTGTGA	agccttgctcctgtattaat...	343...	tatggttatta	ttttgcat
O. Cun	gcaagaag	gtatcactttcc...131...	tagataatcaagaagacaaa	TGGC	TCTTTTGTGA	agccctgctcctgtattaat...	343...	tattgttttta	ttttgcat
C. Fam	ctaagaag	gtatcgctttcc...130...	tagataatcaagaagacaaa	TGGC	TCTTTTGTGA	agccctgctcctgtattaat...	351...	tctgttatttc	ttttgcat
F. Cat	ctaagaag	gtatcgctttcc...130...	tagataatcaagaagacaaa	TGGC	TCTTTTGTGA	agccctgctcctgtattaat...	347...	tactgttatttc	ttttgcat
B. Tau	gtaagaag	gtatccttttcc...130...	tagataatcaagaagacaaa	TGGC	TCTTTTGTGA	agccctgctcctgtattaat...	336...	tactgttatttc	ttttgcat
E. Cab	gtaagaag	gtactgttttcc...130...	tagataatcaagaagacaaa	TGGC	TCTTTTGTGA	agccctgctcctgtattaat...	328...	tattgttatttc	ttttgcat
S. Sus	gtaagaag	gtatcgctttcc...130...	tagataatcaagaagacaaa	TGGC	TCTTTTGTGA	agccctgctcctgtattaat...	356...	tactgttatttc	ttttgcat
O. Avi	gtaagaag	gtatccttttcc...130...	tagataatcaagaagacaaa	TGGC	TCTTTTGTGA	agccctgctcctgtattaat...	328...	tactgttatttc	ttttgcat
L. Afr	ataagaag	gtaccgctttcc...130...	tagataatcaagaagacaaa	TGGC	TCTTTTGTGA	agccctgctcctgtattaat...	341...	tatttggattta	ctttttat
		* **	*** ** *	*****	*****	*****	*	* **	*** *

id=553411 gene=ENSG00000120093 name=HOXB3 segment=chr17.46651850.46652404.-1 type=IN VIEW

Figure 782: CS=8.4



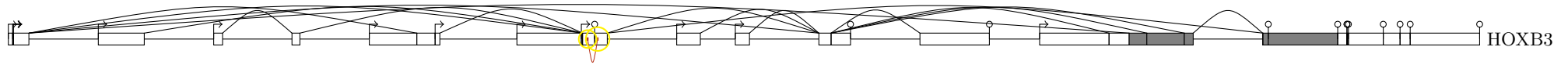
H.Sap	ataagaag	gtatcgtttcc...	208...	gtatcgaaagtatgactggg	GACCAAAATAGCTTTC	-tgtctc-tgaggtcccagtc	---...	268...	tattgtattta	ttttgcat		
R.Mac	ataagaag	gtatcgtttcc...	208...	gtatcgaaagtatgactggg	GACCAAAATAGCTTCTG	-tctc-tgaggtcccagtc	cacc...	269...	tattgtattta	ttttgcat		
P.Abe	ataagaag	gtatcgtttcc...	208...	gtatcgaaagtatgactggg	GACCAAAATAGCTTCTG	-tctc-tgaggtcccagtc	cacc...	265...	tattgtattta	ttttgcat		
C.Jac	ataagaag	gtattgctttcc...	208...	gtattgaaagtatgactggg	GACCAAAATAGCTTCTG	-tctc-tgaggtcccagtc	cacc...	270...	tgtgtattta	ttttgcat		
M.Mus	atgagaag	gtatcactttcc...	208...	gtatcgaaagtaaggctggg	GACCAAAATAGCT	-gtctgtctc-tgaggtcccaa	----	264...	gattgtgttta	ttttacgt		
R.Nor	ataagaag	gtatcgtttcc...	208...	gtatcgaaagtaaggctggg	GACCAAAATAGCT	-gtctctctc-tgtgatcccaa	----	283...	gattgtgttta	tcttacat		
O.Cun	gcaagaag	gtatcactttcc...	209...	gtatcgaaagtaggactagg	GACCAAAATAGCTTT	-cctgtctc-tcaggtcccagtc	----	266...	tattgttttta	ttttgcat		
C.Fam	ctaagaag	gtatcgtttcc...	208...	gtatcgaaagtaggactggg	GACCAAAATAGCTTTG	-tgtctc-tgaggtcccagtc	---	273...	tctgttatttc	ttttgtat		
F.Cat	ctaagaag	gtatcgtttcc...	208...	gtatcgaaagtaggactggg	GACCAAAATAGCTTT	-ctgtctc-tgaggtcccagtc	----	270...	tactgttatttc	ttttgtat		
B.Tau	gtaagaag	gtatcctttcc...	208...	gtatcgaaagtaggactggg	GACCAAAATAGCTTT	-ctgtctc-tgaggtcccagtc	---	259...	tactgttatttc	ttttgcat		
E.Cab	gtaagaag	gtactgtttcc...	208...	gtattgaaagtaggactggg	GACCAAAATAGCTTT	-ctgcctc-tgaggtcccagtc	----	251...	tattgttatttc	ttttgtat		
S.Sus	gtaagaag	gtatcgtttcc...	208...	gtatcgaaagtaggactggg	GACCAAAATAGCTTT	-ctgtctc-tgaggtcccagtc	----	279...	tactgttatttc	ttttgcat		
O.Avi	gtatcgtttcc...	208...	gtatcgaaagtaggactggg	GACCAAAATAGCT	-ttctgtctc-tgaggtcccag	----	253...	tactgttatttc	ttttgcat			
L.Afr	ataagaag	gtaccgctttcc...	208...	gtatcgaaagtaggactggg	GACCAAAATAGCTTTC	-tgtctc-tgaggtcccagtc	---	263...	tattgtattta	ctttttat		
	*****	***	*****	****	*****	*	*****	*****	***	* * *	**	*

id=553411 gene=ENSG0000120093 name=HOXB3 segment=chr17.46651850.46652404.-1 type=IN

H.Sap	ccagccaa	ccccctccaacg...	61...	-cccttcagccagggtgctt	GGAAGCTAat	TTTGGTT	aaatcagcagaggcta	aatgg...	220...	ttagttttc	ttt	ggagttga-
R.Mac	ccagccaa	ccccctccaacg...	60...	ccccttcagccagggtgct	CGGAAGCTAat	TTTGGTT	aaatcagcagaggcta	aatgg...	219...	ttagttttat	t	ggagttga-
P.Abe	ccagccaa	ccccctccaacg...	60...	ccccttcagccagggtgct	CGGAAGCTAat	TTTGGTT	aaatcagcagaggcta	aatgg...	224...	tctctaactaa		ggagttga-
C.Jac	ccagccaa	ccccctccaacg...	60...	ccccttcagccagggtgct	CAGAAGCTAat	TTTGGTT	aaatcagcagaggcta	aatgg...	223...	ttagttttc	t	ggagttga-
M.Mus	ccagctaa	ccccctccaacg...	69...	----ttcagccagggtgct	ccgaAGCTAat	TTTGGTT	aaatcatcagaggcta	aatgg...	237...	cacgtttct	t	ggagttga-
R.Nor	ccagctac	ccccctccaacg...	69...	----ttcagccagggtgct	ccgaAGCTAat	TTTGGTT	aaatcatcagaggcta	aatgg...	226...	tttattttat	c	aaaataaa-
O.Cun	ccagccaa	ccccctccaacg...	62...	-ccttcagccagggtgct	caGAAGCTA	TTTGGTT	aaatcatcagaggcta	aatgg...	225...	tcagtttc	c	g--gtcgacc
C.Fam	ccagccaa	ccccctccaacg...	65...	-cccttcagccagggtgct	cCGAAGCTA	TTTGGTT	aaatcatcagaggcta	aatgg...	235...	tgagttttc	t	ggagttga-
F.Cat	ccagccaa	ccccctccaacg...	63...	-ccttcagccagggtgct	ctGAAGCTA	TTTGGTT	aaatcatcagaggcta	aatgg...	237...	ttagttttc	t	ggggttga-
B.Tau	ccagccaa	ccccctccaacg...	62...	-ccttcagccagggtgct	ccGAAGCTA	TTTGGTT	aaatcatcagaggcta	aatgg...	236...	ttagttttc	t	ggagttga-
E.Cab	ccagccaa	ccccctccaacg...	62...	-ccttcagccagggtgct	ccGAAGCTA	TTTGGTT	aaatcatcagaggcta	aatgg...	240...	ctagttttc	t	ggagttga-
S.Sus	ccagccaa	ccccctccaacg...	66...	-ccttcagccagggtgct	ccGAAGCTA	TTTGGTT	aaatcatcagaggcta	aatga...	232...	ttagttttc	t	ggaattga-
O.Avi	ccagccaa	ccccctccaacg...	64...	----ttcaaccagggtgct	ccAGCTAat	TTTGGTT	aaatcatcagaggcta	aatgg...	240...	ttagttttc	t	agagttga-
L.Afr	ccagccaa	ccccctccaacg...	65...	-cccttcagccagggtgct	tGGAAGCTA	TTTGGTT	aaatcatcagaggcta	aatgg...	237...	ttagttttc	t	gaagttga-
	*****	*	*****	***	*****	*****	*****	*****	*****	*****	*	*

id=553425 gene=ENSG0000120093 name=HOXB3 segment=chr17.46631285.46631646.-1 type=IN VIEW

Figure 783: CS=4.2



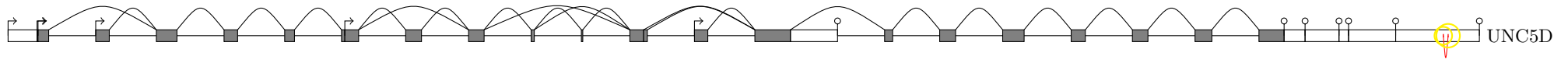
H. Sap	ttcaacag	caaatctccttgga	CCGGct	GTTGGGGGAAAAAAGTg	TTAGC	cgctctctcccggatctgcaaggggaaaaaat	ttggaaccataaa	gttgaaaa
R. Mac	ttcaacag	caaatctcctcaga	CCGGct	GTTGGGGGAAAAAAGTg	TTAGC	cgctctctcccggatctgcaaggggaaaaaat	ttggaaccataaa	gttgaaaa
P. Tro	ttcaacag	caaatctccttgaccggt	GTTGGGGGAAAAAAGTg	TTAGC	cgctctctcccggatctgcaaggggaaaaaat	ttggaaccataaa	gttgaaaa	gttgaaaa
P. Abe	ttcaacag	caaatctcctcaga	CCGGct	GTTGGGGGAAAAAAGTg	TTAGC	cgctctctcccggatctgcaaggggaaaaaat	ttggaaccataaa	gttgaaaa
C. Jac	ttcaacag	caaatctcctcaga	CCGGct	GTTGGGGGAAAAAAGTg	TTAGC	cgctctctcccggatctgcaaggggaaaaaat	ttggaaccataaa	gttgaaaa
M. Mus	ttcaacag	caaatctccgcaga	CCGGct	GTTGGGGGAAAAAAGTg	TTAGC	cgctctctcccggatctgcaaggggaaaaaat	ttggaaccataaa	gttgaaaa
R. Nor	ttcaacag	caaatctccacaga	CCGGct	GTTGGGGGAAAAAAGTg	TTAGC	cgctctctcccggatctgcaaggggaaaaaat	ttggaaccataaa	gttgaaaa
C. Por	ttcaacag	caaatctccgcaga	CCGGct	GTTGGGGGAAAAAAGTg	TTAGC	cgctctctcccggatctgcaaggggaaaaaat	ttggaaccataaa	gttgaaaa
O. Cun	ttcaacag	caaatctccacaga	CCGGct	GTTGGGGGAAAAAAGTg	TTAGC	cgctctctcccggatctgcaaggggaaaaaat	ttggaaccataaa	gttgaaaa
C. Fam	ttcaacag	caaatctccgcagaccgg	CTGTTGGGGGAAAAAAGTg	TTAGCT	ggctctctcccggatctgcaaggggaaaaaat	ttggaaccataaa	gttgaaaa	gttgaaaa
F. Cat	ttcaacag	caaatctccgcaga	CCGGct	GTTGGGGGAAAAAAGTg	TTAGCT	ggctctctcccggatctgcaaggggaaaaaat	ttggaaccataaa	gttgaaaa
B. Tau	ttcaacag	caaatctccgcaga	CCGGct	GTTGGGGGAAAAAAGTg	TTAGC	cgccactcccggatctgcaaggggaaaaaat	ttggaaccataaa	gttgaaaa
E. Cab	ttcaacag	caaatctccgcaga	CCGGct	GTTGGGGGAAAAAAGTg	TTAGC	cgctctctcccggatctgcaaggggaaaaaat	ttggaaccataaa	gttgaaaa
S. Sus	ttcaacag	caaatctccgcaga	CCGGct	GTTGGGGGAAAAAAGTg	TTAGC	cgccactcccggatctgcaaggggaaaaaat	ttggaaccataaa	gttgaaaa
L. Afr	ttcaacag	caaatctctgcaga	CCGGct	GTTGGGGGAAAAAAGTg	TTAGC	catctctcccggatctgcaaggggaaaaaat	ttggaaccataaa	gttgaaaa
	*****	*****	*****	*****	*****	* * * * *	* * * * *	*****

id=553414 gene=ENSG00000120093 name=HOXB3 segment=chr17.46651290.46651376_-1 type=AN

H. Sap	accataaa	GTTGAaa	ACTTTTTTCTCTCAGT-	TTGGAagaag	---cccttcgtcatgaa...	32...agaggcgca-aag	gtaacaaa
R. Mac	accataaa	GTTGAaa	ACTTTTTTCTCTCAGT-	TTGGAagaag	---cccttcgtcatgaa...	32...agaggcgca-aag	gtaacaaa
P. Tro	accataaa	GTTGAaa	ACTTTTTTCTCTCAGT-	TTGGAagaag	---cccttcgtcatgaa...	35...agaggcgca-aag	gtaacaaa
P. Abe	accataaa	GTTGAaa	ACTTTTTTCTCTCAGT-	TTGGAagaag	---cccttcgtcatgaa...	32...agaggcgca-aag	gtaacaaa
C. Jac	accataaa	GTTGAaa	ACTTTTTTCTCTCAGT-	TTGGAagaag	---cccttcgtcatgaa...	32...agaggcgca-aag	gtaacaaa
M. Mus	gccataaa	GTTGAaa	ACTTTTTTCTCTCAGT-	TTGGAagaag	---cccttcgtcatgaa...	36...agaggcgca-gag	gtaacaaa
R. Nor	gccataaa	GTTGAaa	ACTTTTTTCTCTCAGT-	TTGGAagaag	---cccttcgtcatgaa...	33...-gaggcacagaag	gtaacaaa
C. Por	accataaa	GTTGAaa	ACTTTTTTCTCTCAGT-	TTGGAagaag	---cccttcgtcatgaa...	33...agaggcgca-aag	gtaacaaa
O. Cun	accataaa	GTTGAaa	ACTTTTTTCTCTCAGT-	TTGGAagaag	---cccttcgtcatgaa...	32...agaggcgca-gag	gtaacaaa
C. Fam	accataaa	GTTGAaa	ACTTTTTTCTCTCAGT-	TTGGAagaag	---cccttcgtcatgaa...	32...agaggcgca-aag	gtaacaaa
F. Cat	accataaa	GTTGAaa	ACTTTTTTCTCTCAGT-	TTGGAagaag	---cccttcgtcatgaa...	32...agaggcgca-aag	gtaacaaa
B. Tau	accataaa	GTTGAaa	ACTTTTTTCTCTCAGT-	TTGGAagaag	---cccttcgtcatgaa...	32...agaggcgca-aag	gtaacaaa
E. Cab	accataaa	GTTGAaa	ACTTTTTTCTCTCAGT-	TTGGAagaag	---cccttcgtcatgaa...	32...agaggcgca-aag	gtaacaaa
S. Sus	accataaa	GTTGAaa	ACTTTTTTCTCTCAGT-	TTGGAagaag	---cccttcgtcatgaa...	33...agaggcgca-aag	gtaacaaa
L. Afr	gccataaa	GTTGAaa	ACTTTTTTCTCTCAGT-	TTGGAagaag	---cccttcgtcatgaa...	32...agagacgca-aag	gtaacaaa
	* * * * *	*****	*****	*****	*****	* * * * *	*****

id=553415 gene=ENSG00000120093 name=HOXB3 segment=chr17.46651199.46651289_-1 type=AN VIEW

Figure 784:



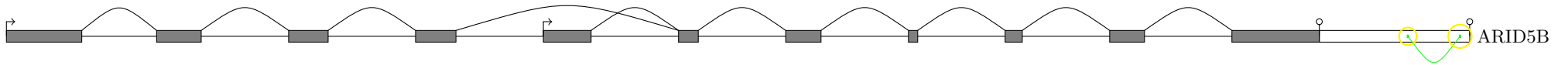
H. Sap	cta	aatc	tt	ag	atg	tgt	tgc	a...	1459	..	gg	ct	ga	ac	ct	ta	at	tt	ga	ATGAAGCTgAAGG	act	ga	gc	ag	cc	ag	ag	gag	a...	352	..	ca	tt	tt	ag	gata	ct	aca	tga	
R. Mac	cta	aatc	tt	ag	atg	tgt	tgc	a...	1458	..	gg	ct	ga	ac	ct	ta	at	tt	ga	ATGAAGCTgAAGG	agt	ga	gc	ag	cc	ag	ag	gag	a...	350	..	ca	tt	tt	ag	gata	ct	ac	tga	
P. Tro	cta	aatc	tt	ag	ac	gt	gt	tgc	a...	1463	..	gg	ct	ga	ac	ct	ta	at	tt	ga	ATGAAGCTgAAGG	act	ga	gc	ag	cc	ag	ag	gag	a...	345	..	ca	tt	tt	ag	gata	ct	aca	tga
P. Abe	cta	aatc	tt	ag	ac	gt	gt	tgc	a...	1463	..	gg	ct	ga	ac	ct	ta	at	tt	ga	ATGAAGCTgAAGG	act	ga	gc	ag	cc	ag	ag	gag	a...	348	..	ca	tt	tt	ag	gata	ct	aca	tga
C. Jac	cta	aatc	tt	ag	ac	gt	gt	tgc	a...	1455	..	gg	ct	ga	ac	ct	ta	at	tt	ga	ATGAAGCTgAAGG	act	ga	gc	ag	cc	ag	ag	gag	a...	340	..	ca	tt	tt	ag	gata	ct	aca	tga
M. Mus	cta	aatc	tt	ag	at	gt	gt	tgc	a...	1461	..	ag	ct	ga	ac	ta	act	ct	gg	ac	ATGAAGCTgAAGG	act	ga	gc	ag	cc	ag	ag	gag	a...	343	..	ca	tt	tt	ag	gata	tg	at	ccat
C. Por	cta	aatc	tt	ag	at	gt	gt	tgc	a...	1459	..	gg	ct	ga	ac	ta	aa	tt	cg	ac	ATGAAGCTgAAGG	act	ga	gc	ag	cc	ag	ag	gag	a...	328	..	tt	at	tt	ag	gata	ct	ct	gtga
O. Cun	cta	aatc	tt	ag	at	gt	gt	tgc	a...	1429	..	gg	ct	ga	ac	ct	ta	at	tt	ga	ATGAAGCTgAAGG	act	ga	gc	ag	cc	ag	ag	gag	a...	347	..	ca	tt	tt	ag	gacg	ct	ct	gtga
B. Tau	cga	atc	tt	ag	gt	gt	tgc	a...	1495	..	aa	ct	ga	ata	ct	ca	at	ct	gac	ATGAAGCTgAAGG	act	ga	gc	ag	cc	ag	ag	gag	a...	343	..	ca	tt	tt	ag	gata	ct	cc	acga	
E. Cab	cta	aatc	tt	ag	at	gt	gt	tgc	a...	1453	..	aa	ct	ga	ac	ct	ta	at	tt	aa	ATGAAGCTgAAGG	agg	ga	gc	ag	cc	ag	ag	gag	a...	338	..	ca	tt	tt	ag	gata	ct	cc	atga
S. Sus	cta	aatc	tt	ag	ac	gt	gt	tgc	a...	1479	..	aa	ct	ga	ata	ct	ta	at	tt	ga	ATGAAGCTgAAGG	act	ga	gc	ag	cc	ag	ag	gag	a...	351	..	ca	tt	tt	ag	gata	ct	cc	acga
O. Avi	cta	aatc	tt	ag	gt	gt	tgc	a...	1517	..	aa	ct	ga	ata	ct	ta	at	tt	ga	ATGAAGCTgAAGG	act	ga	gc	ag	cc	ag	ag	gag	a...	338	..	ca	tt	tt	ag	gata	ct	cc	acga	
L. Afr	cta	aatc	tt	ag	ac	gt	gt	tgc	a...	1404	..	gg	ct	ga	ac	ct	ta	at	tt	ga	ATGAAGCTgAAGG	act	ga	gc	ag	cc	ag	ag	gag	a...	340	..	ca	tt	tt	ag	gata	ct	gc	atgg
	*	*****		**	*****		****	***	*	*	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*	****										

id=650002 gene=ENSG00000156687 name=UNC5D segment=chr8_35652181_35654068_1 type=E3

H. Sap	cta	aatc	tt	ag	at	gt	gt	tgc	a...	1511	..	ag	ag	gt	tt	ga	at	ga	ag	cat	ag	CCTTGGCTTCAT	acc	ca	ct	tt	tt	gt	gc	ct	t...	301	..	ca	tt	tt	ag	gata	ct	aca	tga
R. Mac	cta	aatc	tt	ag	at	gt	gt	tgc	a...	1510	..	ag	ag	gt	tt	ga	at	ga	ag	cat	ag	CCTTGGCTTCAT	acc	ca	ct	tt	tt	gt	gc	ct	t...	299	..	ca	tt	tt	ag	gata	ct	ac	tga
P. Tro	cta	aatc	tt	ag	ac	gt	gt	tgc	a...	1515	..	ag	ag	gt	tt	ga	at	ga	ag	cat	ag	CCTTGGCTTCAT	acc	ca	ct	tt	tt	gt	gc	ct	t...	294	..	ca	tt	tt	ag	gata	ct	aca	tga
P. Abe	cta	aatc	tt	ag	ac	gt	gt	tgc	a...	1515	..	ag	ag	gt	tt	ga	at	ga	ag	cat	ag	CCTTGGCTTCAT	acc	ca	ct	tt	tt	gt	gc	ct	t...	297	..	ca	tt	tt	ag	gata	ct	aca	tga
C. Jac	cta	aatc	tt	ag	ac	gt	gt	tgc	a...	1507	..	ag	ag	gt	tt	ga	at	ga	ag	cat	gg	CCTTGGCTTCAT	acc	ca	ct	tt	tt	gt	gc	ct	t...	289	..	ca	tt	tt	ag	gata	ct	aca	tga
M. Mus	cta	aatc	tt	ag	at	gt	gt	tgc	a...	1513	..	ag	gg	t	ct	aa	gc	aa	gc	at	gg	CCTTGGCTTCAT	acc	ca	ct	tt	tt	gt	gc	ct	t...	292	..	ca	tt	tt	ag	gata	tg	at	ccat
C. Por	cta	aatc	tt	ag	at	gt	gt	tgc	a...	1511	..	ag	ag	gt	tt	ga	at	aa	gc	at	gg	CCTTGGCTTCAT	acc	ca	ct	tt	tt	gt	gc	ct	t...	277	..	tt	at	tt	ag	gata	ct	ct	gtga
O. Cun	cta	aatc	tt	ag	at	gt	gt	tgc	a...	1481	..	ag	ag	gt	tt	ga	aa	gc	at	gg	CCTTGGCTTCAT	acc	ca	ct	tt	tt	gt	gc	ct	t...	296	..	ca	tt	tt	ag	gacg	ct	ct	gtga	
B. Tau	cga	atc	tt	ag	gt	gt	tgc	a...	1547	..	ag	ag	gt	tt	ga	at	aa	gc	at	gg	CCTTGGCTTCAT	acc	gc	cc	tt	ct	tt	gt	gc	ct	t...	292	..	ca	tt	tt	ag	gata	ct	cc	acga
E. Cab	cta	aatc	tt	ag	at	gt	gt	tgc	a...	1505	..	aga	at	gt	tt	ga	at	aa	gc	at	gg	CCTTGGCTTCAT	acc	ca	ct	tt	tt	gt	gc	ct	t...	287	..	ca	tt	tt	ag	gata	ct	cc	atga
S. Sus	cta	aatc	tt	ag	ac	gt	gt	tgc	a...	1531	..	ag	ag	gt	tt	ga	at	aa	gc	at	gg	CCTTGGCTTCAT	acc	ca	ct	tt	tt	gt	gc	ct	t...	300	..	ca	tt	tt	ag	gata	ct	cc	acga
O. Avi	cta	aatc	tt	ag	gt	gt	tgc	a...	1569	..	ag	ag	gt	tt	ga	at	aa	gc	at	gg	CCTTGGCTTCAT	acc	ca	ct	tt	tt	gt	gc	ct	t...	287	..	ca	tt	tt	ag	gata	ct	cc	acga	
L. Afr	cta	aatc	tt	ag	ac	gt	gt	tgc	a...	1456	..	ag	ag	tt	tt	ga	at	aa	gc	at	gg	CCTTGGCTTCAT	acc	ca	ct	tt	tt	gt	gc	ct	t...	289	..	ca	tt	tt	ag	gata	ct	gc	atgg
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id=650002 gene=ENSG00000156687 name=UNC5D segment=chr8_35652181_35654068_1 type=E3 VIEW

Figure 785:



H. Sap	cggcatgg	ccaacagagctt...	3480...	gtctgaagaatagcagcata	ATCTCTTGgCTGTT	tatacttttttaaactttcc...	322...	actatctgtttc	cttttggg
R. Mac	cggcatgg	ccaacagagctt...	3474...	gtctgaagaatagcagcata	ATCTCTTGgCTGTT	tatacttttttaaactttcc...	322...	actatctgtttc	cttttggg
P. Tro	cggcatgg	ccaacagagctt...	3469...	gtctgaagaatagcagcata	ATCTCTTGgCTGTT	tatacttttttaaactttcc...	322...	actatctgtttc	cttttggg
P. Abe	cagcatgg	ccaacagagctt...	3473...	gtctgaagaatagcagcata	ATCTCTTGgCTGTT	tatacttttttaaactttcc...	322...	actatctgtttc	cttttggg
C. Jac	cggcatgg	ccaacagagctt...	3494...	gtctgaagaatagcagcata	ATCTCTTGgCTGTT	tatacttttttaaactttcc...	319...	actatctgtttc	cttttggg
M. Mus	tggtgtgg	tccattgcacca-	3541...	gaaaaaaaaatagcagcgtg	ATCTCTTGgCTGTT	tatacttttttaaactttcc...	328...	actatctgtttc	ctttggga
R. Nor	cgggtgtgg	tcca-tgcaccga...	3586...	aaaaaaaaaatagcagcgtg	ATCTCTTGgCTGTT	tatacttttttaaactttcc...	323...	actatctgtttc	ctttggga
C. Por	cggcatgg	ctgatggagctt-	3454...	gtctgaaaaatagcagcata	ATCTCTTGgCTGTT	tatacttttttaaactttac...	322...	actatctgtttc	cttttgag
O. Cun	cggcctgg	ctgccggagctg-	3484...	gtctgaagaacagcagcata	ATCTCTTGgCTGTT	tataattttttaaagggtcc...	323...	actatctgtttc	tttttggg
C. Fam	cggcgcg	ctcgggagctc-	3696...	gtctgaaaaatagcagcata	ATCTCTTGgCTGTT	tatacttttttaaactttcc...	323...	actatctgtttc	cttttggg
B. Tau	cgacatgg	ttaacagtgtt-	3450...	gtctgaagaatagcagcata	ATCTCTTGgCTGTT	tatacttttttaaactttcc...	322...	actatctgtttc	cttttggg
E. Cab	tggcatgg	ctgacagagctg-	3501...	gtctcaagaatagcagcata	ATCTCTTGgCTGTT	tatacttttttaaactttcc...	322...	actatctgtttc	cttttggg
L. Afr	cggcgtgg	ctaacagagctt-	3437...	gtctgaagaatagcagcata	ATCTCTTGgCTGTT	tatacttttttaaactttcc...	317...	tgttactgtttc	cttttggg
	**	* *		** ** *****	*****	*****	* *	* *****	*** *

id=320540 gene=ENSG00000150347 name=ARID5B segment=chr10_63852824_63856703.1 type=E3

H. Sap	cggcatgg	ccaacagagctt...	3778...	caatagtttccaatcacat	AGCAGgCAAGAGAT	attttgactttttgatccactgtaatatttaataaaaaatggtactatctgtttc	cttttggg	
R. Mac	cggcatgg	ccaacagagctt...	3772...	caatagtttccaatcacat	AGCAGgCAAGAGAT	attttgactttttgatccactgtaatatttaataaaaaatggtactatctgtttc	cttttggg	
P. Tro	cggcatgg	ccaacagagctt...	3767...	caatagtttccaatcacat	AGCAGgCAAGAGAT	attttgactttttgatccactgtaatatttaataaaaaatggtactatctgtttc	cttttggg	
P. Abe	cagcatgg	ccaacagagctt...	3771...	caatagtttccaatcacat	AGCAGgCAAGAGAT	attttgactttttgatccactgtaatatttaataaaaaatggtactatctgtttc	cttttggg	
C. Jac	cggcatgg	ccaacagagctt...	3789...	caatagtttccaatcacat	AGCAGgCAAGAGAT	attttgactttttgatccactgtaatatttaataaaaaatggtactatctgtttc	cttttggg	
M. Mus	tggtgtgg	tccattgcacca-	3845...	caatggtttccaatcacat	AGCAGgCAAGAGAT	attttgactttttgatccactgtaatatttaataaaaaatggtactatctgtttc	ctttggga	
R. Nor	cgggtgtgg	tcca-tgcaccga...	3885...	caatagtttccagtccat	AGCAGgCAAGAGAT	attttgactttttgatccactgtaatatttaataaaaaatggtactatctgtttc	ctttggga	
C. Por	cggcatgg	ctgatggagctt-	3752...	caatagtttccaatcacat	AGCAGgCAAGAGAT	attttgactttttgatccactgtaatatttaataaaaaatggtactatctgtttc	cttttgag	
O. Cun	cggcctgg	ctgccggagctg-	3783...	caatagtttccaatcacat	AGCAGgCAAGAGAT	attttgactttttgatccactgtaatatttaataaaaaatggtactatctgtttc	tttttggg	
C. Fam	cggcgcg	ctcgggagctc-	3995...	caatagtttccaatcacat	AGCAGgCAAGAGAT	attttgactttttgatccactgtaatatttaataaaaaatggtactatctgtttc	cttttggg	
B. Tau	cgacatgg	ttaacagtgtt-	3748...	caatagtttccaatcacat	AGCAGgCAAGAGAT	attttgactttttgatccactgtaatatttaataaaaaatggtactatctgtttc	cttttggg	
E. Cab	tggcatgg	ctgacagagctg-	3799...	caatagtttccaatcacat	AGCAGgCAAGAGAT	attttgactttttgatccactgtaatatttaataaaaaatggtactatctgtttc	cttttggg	
L. Afr	cggcgtgg	ctaacagagctt-	3735...	caatagtttccaatcacat	AGCAGgCAAGAGAT	attttgta-tttttgatccactgtaatatttaataaaaaatggtactatctgtttc	cttttggg	
	**	* *		*** *****	*****	*****	*****	*** *

id=320540 gene=ENSG00000150347 name=ARID5B segment=chr10_63852824_63856703.1 type=E3 VIEW

Figure 786:



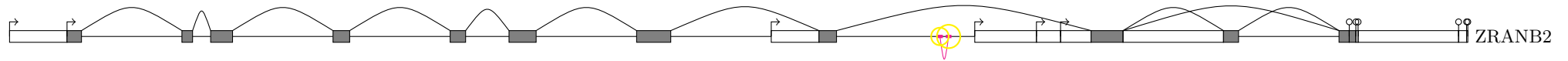
H.Sap	tcctaaga	gtaagtgatcct...	.4838...	tgcataataaattgcaataa	TTGTaa	TGTGCCAT	aaatcccagagcctatgcat...	.73...	tctgttggccag	ggtcccgg
R.Mac	tcctgaga	gtaagtgatccg...	.4838...	tgcataataaattgcaataa	TTGTaa	TGTGCCAT	aaatcccagagcctatgcat...	.73...	tctgttggccag	ggtcccgg
P.Tro	tcctaaga	gtaagtgatccg...	.4838...	tgcataataaattgcaataa	TTGTaa	TGTGCCAT	aaatcccagagcctatgcat...	.73...	tctgttggccag	ggtcccgg
P.Abe	tcctaaga	gtaagtgatccg...	.4838...	tgcataataaattgcaataa	TTGTaa	TGTGCCAT	aaatcccagagcctatgcat...	.73...	tctgttggccag	ggtcccgg
C.Jac	tcctaaga	gtaagtgatccg...	.4838...	tgcataataaattgcaataa	TTGTaa	TGTGCCAT	aaatcccagagcctatgcat...	.73...	tctgttggccag	ggtcccgg
M.Mus	aacgaaga	gtaagtgacctg...	.4838...	ttcatgataaattgcaataa	TTGTga	TGTGCCAT	aaatcccagagcctatgcat...	.73...	tctgttggccag	ggtcccgg
R.Nor	aacgaaga	gtaagtgacctg...	.4838...	ttcatgataaattgcaataa	TTGTga	TGTGCCAT	aaatcccagagcctatgcat...	.73...	tctgttggccag	ggtcccgg
C.Por	tcccgcga	gtaagtgacccg...	.4838...	tgcataataaattgcaataa	TTGTaa	TGTGCCAT	aaatcccagagcctatgcat...	.73...	tctgttggccag	ggtcccgg
O.Cun	ccccgaga	gtaagtgatccg...	.4838...	tgcataataaattgcaataa	TTGTaa	TGTGCCAT	aaatcccagagcctatgcat...	.73...	tctgttggccag	ggtcccgg
C.Fam	tcctaaga	gtaagtgatccg...	.4838...	tgcataataaattgcaataa	TTGTaa	TGTGCCAT	aaatcccagagcctatgcat...	.73...	tctgttggccag	ggtcccgg
B.Tau	tcctaaga	gtaagtgatccg...	.4838...	tgcataataaattgcaataa	TTGTaa	TGTGCCAT	aaatcccagagcctatgcat...	.73...	tctgttggccag	ggtcccgg
E.Cab	tcctaaga	gtaagtgatccg...	.4838...	tgcataataaattgcaataa	TTGTaa	TGTGCCAT	aaatcccagagcctatgcat...	.73...	tctgttggccag	ggtcccgg
O.Avi	tcctaaga	gtaagtgatccg...	.4838...	nnnnnnnaaattgcaataa	TTGTaa	TGTGCCAT	aaatcccagagcctatgcat...	.73...	tctgttggccag	ggtcccgg
L.Afr	tcctaaga	gtaagtgacccg...	.4838...	tgcataataaattgcaataa	TTGTaa	TGTGCCAT	aaatcccagagcctatgcat...	.73...	tctgttggccag	ggtcccgg
		* **	***** *		*****	*****	*****	*****	*****	*****

id=672492 gene=ENSG00000117707 name=PROX1 segment=chr1.214162065.214169811.1 type=I5

H.Sap	ttggccag	ggtcccgggattccttgagctgtgcccagctgacgagcttttgaag	ATGGCACAATAA	ccgtccagtg	atgcctga
R.Mac	ttggccag	ggtcccgggattccttgagctgtgcccagctgacgagcttttgaag	ATGGCACAATAA	ccgtccagtg	atgcctga
P.Tro	ttggccag	ggtcccgggattccttgagctgtgcccagctgacgagcttttgaag	ATGGCACAATAA	ccgtccagtg	atgcctga
P.Abe	ttggccag	ggtcccgggattccttgagctgtgcccagctgacgagcttttgaag	ATGGCACAATAA	ccgtccagtg	atgcctga
C.Jac	ttggccag	ggtcccgggattccttgagctgtgcccagctgacgagcttttgaag	ATGGCACAATAA	ccgtccagtg	atgcctga
M.Mus	ttggccag	ggtcccgggattccttgagctgtgcccagctgacgagcttttgaag	ATGGCACAATAA	ctgtccagtg	atgcctga
R.Nor	ttggccag	ggtcccgggattccttgagctgtgcccagctgacaagcttttgaag	ATGGCACAATAA	ctgtccagtg	atgcctga
C.Por	ttggccag	ggtcccgggattccttgagctgtgcccagctgacgagcttttgaag	ATGGCACAATAA	ccgtccagtg	atgcctga
O.Cun	ttggccag	ggtcccgggattccttgagctgtgcccagctgacgagcttttgaag	ATGGCACAATAA	ccgtccagtg	atgcctga
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B.Tau	ttggccag	ggtcccgggattccttgagctgtgcccagctgacgagcttttgaag	ATGGCACAATAA	ctgtccagtg	atgcctga
E.Cab	ttggccag	ggtcccgggattccttgagctgtgcccagctgacgagcttttgaag	ATGGCACAATAA	ctgtccagtg	atgcctga
O.Avi	ttggccag	ggtcccgggattccttgagctgtgcccagctgacgagcttttgaag	ATGGCACAATAA	ctgtccagtg	atgcctga
L.Afr	ttggccag	ggtcccgggattccttgagctgtgcccagctgacgagcttttgaag	ATGGCACAATAA	ccgtccagtg	atgcctga
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id=672493 gene=ENSG00000117707 name=PROX1 segment=chr1.214169812.214169878.1 type=AN VIEW

Figure 787:



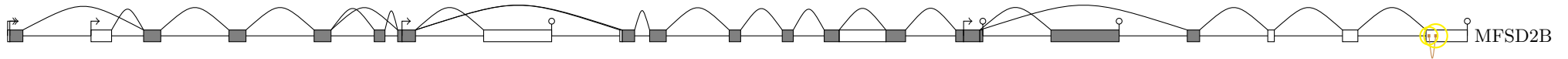
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Figure 788: CS=13.44



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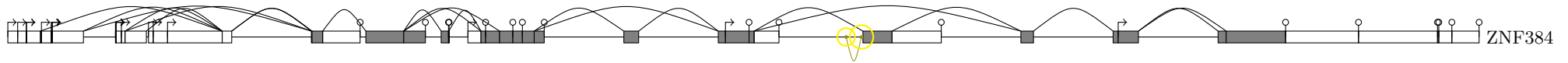
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Figure 789:



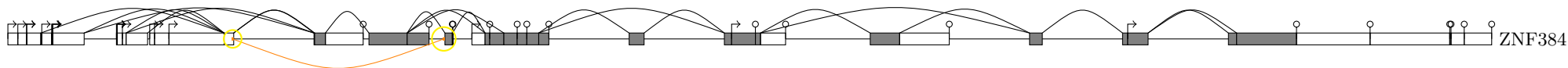
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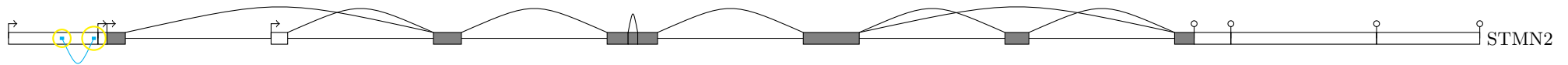
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C. Fam	cctactgt	gtgcctagcaat...45...ctgcctttgaggaggtgaca	TTCTTTCTTCTCTG	aatcaag	gagtctcc
F. Cat	cctactgt	gtgcctagcaat...45...ctgcctttgaggaggtgaca	TTCTTTCTTCTCTG	aatcaag	gagtctcc
B. Tau	cctactgt	gtgcctagcaat...45...ctgcctttgaggaggtgaca	TTCTTTCTTCTCTG	aatcaag	gagtctcc
E. Cab	cctactgt	gtgcctagcaat...45...ctgcctttgaggaggtgaca	TTCTTTCTTCTCTG	aatcaag	gagtctcc
S. Sus	cctactgt	gtgcccagcaat...44...ctgcctttgaggaggtgaca	TTCTTTCTTCTCTG	aatcaag	gagtctcc
L. Afr	cctactgt	gtgcctagcaat...45...ctgcctttgaggaggtgaca	TTCTTTCTTCTCTG	aatcaag	gagtctcc
	*****	** ** **** *	*****	*****	*****

id=471583 gene=ENSG0000126746 name=ZNF384 segment=chr12.6787877.6787975_-1 type=IN VIEW

Figure 791:



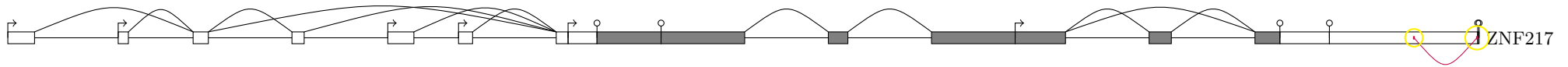
H. Sap	cagttcct	agctcctaggaa...136...atatttaagcttggagatt	CTGA	TCTGCg	GGAGT	catgtcaggggaccttggga...91...ccttattcagtc	ttctctct
R. Mac	cagttcct	agctcctaggaa...136...atatttaagcttggagatt	CTGA	TCTGCg	GGAGT	catgtcaggggaccttggga...91...ccttattcagtc	ttctctct
P. Tro	cagttcct	agctcctaggaa...135...atatttaagcttggagatt	CTGA	TCTGCg	GGAGT	catgtcaggggaccttggga...91...ccttattcagtc	ttctctct
P. Abe	cagttcct	agctcctaggaa...136...atatttaagcttggagatt	CTGA	TCTGCg	GGAGT	catgtcaggggaccttggga...91...ccttattcagtc	ttctctct
C. Jac	cagttcct	agctcctaggaa...136...atatttaagcttggagatt	CTGA	TCTGCg	GGAGT	catgtcaggggaccttggga...91...ccttattcagtc	ttctctct
R. Nor	cagtccct	agctcctaggag...135...atatttaagcttggagatt	CTGA	TCTGCg	GGAGT	catgtcaggggaccttggga...91...ccttattcagtc	ttctctct
C. Por	cagctcct	agctcctaggag...135...atatttaagcttggagatt	CTGA	TCTGCg	GGAGT	catgtcaggggaccttggga...91...ccttattcagtc	ttctctct
O. Cun	cagttcct	agctcctaggag...135...atatttaagcttggagatt	CTGA	TCTGCg	GGAGT	catgtcaggggaccttggga...91...ccttattcagtc	ttctctct
C. Fam	cagttcct	agctcctaggag...136...atatttaagcttggagatt	CTGA	TCTGCg	GGAGT	catgtcaggggaccttggga...91...ccttattcagtc	ttctctct
F. Cat	cagttcct	agctcctaggag...136...atatttaagcttggagatt	CTGA	TCTGCg	GGAGT	catgtcaggggaccttggga...91...ccttattcagtc	ttctctct
B. Tau	cagttcct	agctcctaggag...135...atatttaagcttggagatt	CTGA	TCTGCg	GGAGT	catgtcaggggaccttggga...91...ccttattcagtc	ttctctct
E. Cab	cagttcct	agctcctaggag...135...atatttaagcttggagatt	CTGA	TCTGCg	GGAGT	catgtcaggggaccttggga...91...ccttattcagtc	ttctctct
S. Sus	cagttcct	agctcctaggag...134...atatttaagcttggagatt	CTGA	TCTGCg	GGAGT	catgtcaggggaccttggga...91...ccttattcagtc	ttctctct
L. Afr	caaatcct	agctccttcag...135...atatttaagcttggagatt	CTGA	TCTGCg	GGAGT	catgtcaggggaccttggga...91...ccttattcagtc	ttctctct
	** **	**** * *		*****	*****	* **	**** * * * *****

id=115990 gene=ENSG00000104435 name=STMN2 segment=chr8.80523049.80523355.1 type=E5

H. Sap	cagttcct	agctcctaggaa...246...tctttctctagcacggtccc	ACTCTGCAGAc	TCAG	tcgcttattcagtc	ttctctct
R. Mac	cagttcct	agctcctaggaa...246...tctttctctagcacggtccc	ACTCTGCAGAc	TCAG	tcgcttattcagtc	ttctctct
P. Tro	cagttcct	agctcctaggaa...245...tctttctctagcacggtccc	ACTCTGCAGAc	TCAG	tcgcttattcagtc	ttctctct
P. Abe	cagttcct	agctcctaggaa...246...tctttctctagcacggtccc	ACTCTGCAGAc	TCAG	tcgcttattcagtc	ttctctct
C. Jac	cagttcct	agctcctaggaa...246...tctttctctagcacggtccc	ACTCTGCAGAc	TCAG	tcgcttattcagtc	ttctctct
R. Nor	cagtccct	agctcctaggag...245...tctttctctagcacggtccc	ACTCTGCAGAc	TCAG	tcgcttattcagtc	ttctctct
C. Por	cagctcct	agctcctaggag...245...tctttctctagcacggtccc	ACTCTGCAGAc	TCAG	tcgcttattcagtc	ttctctct
O. Cun	cagttcct	agctcctaggag...245...tctttctctagcacggtccc	ACTCTGCAGAc	TCAG	tcgcttattcagtc	ttctctct
C. Fam	cagttcct	agctcctaggag...246...tctttctctagcacggtccc	ACTCTGCAGAc	TCAG	tcgcttattcagtc	ttctctct
F. Cat	cagttcct	agctcctaggag...246...tctttctctagcacggtccc	ACTCTGCAGAc	TCAG	tcgcttattcagtc	ttctctct
B. Tau	cagttcct	agctcctaggag...245...tctttctctagcacggtccc	ACTCTGCAGAc	TCAG	tcgcttattcagtc	ttctctct
E. Cab	cagttcct	agctcctaggag...245...tctttctctagcacggtccc	ACTCTGCAGAc	TCAG	tcgcttattcagtc	ttctctct
S. Sus	cagttcct	agctcctaggag...244...tctttctctagcacggtccc	ACTCTGCAGAc	TCAG	tcgcttattcagtc	ttctctct
L. Afr	caaatcct	agctccttcag...245...tctttctctagcacggtccc	ACTCTGCAGAc	TCAG	tcgcttattcagtc	ttctctct
	** **	**** * *		*****	*****	* **

id=115990 gene=ENSG00000104435 name=STMN2 segment=chr8.80523049.80523355.1 type=E5 VIEW

Figure 792:



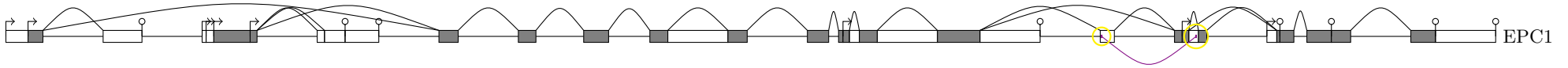
H. Sap	tctc	gcagctcatcac...1315...---taaacctgtattta-----aaaaa---AGAA	CACCAAATCTATTG	Gaaacaagtcgattt	gattt...348...ttgggtgtttg	aatc	cttga
R. Mac	tctc	gcagctcatcac...1312...---taaacctgtattta-----aaaaa---AGAA	CACCAAATCTATTG	Gaaacaagtcgattt	gttt...350...ttgggtgtttg	aac	cttga
P. Tro	tttcta	gcagctcatcac...1313...---taaacctgtattta-----aaaaa---AGAA	CACCAAATCTATTG	Gaaacaagtcgattt	gattt...347...ttgggtgtttg	aat	cttga
P. Abe	tctc	gcagctcatcac...1320...---aacctgtattta-----aaaaaa---AGAA	CACCAAATCTATTG	Gaaacaagtcgattt	gattt...348...ttgggtgtttg	aat	cttga
C. Jac	tctc	gcagctcatcac...1309...---aacctgcattta-----aaaaaa---AGAA	CACCAAATCTATTG	Gaaacaagtcgattt	gttc...341...ttgggtgtttg	aat	cttgg
M. Mus	tcctc	catggagctgcgagga...1172...-----gtatttaaaacgaaaaaa---AAAA	CACCAAATCTATTG	Gaaacaagtcgattt	gtt...341...ttgggtgtttg	agt	cttgg
C. Por	ttctc	tctggagctcaaac...991...-ttaaactgtattta-----aaaa---AAAA	CACCAAATCTATTG	Gaaacaagtcgattt	gtt...327...ttgggtgtttg	aat	cttgg
O. Cun	cttctc	gtgtagctcgtcgc...1073...-ttaaactgtatttt-----aaaa---AAAA	CACCAAATCTATTG	Gaaacaagtcgattt	gttt...337...ttgggtgtttg	agt	cttga
C. Fam	tctc	gcagctcatcac...1549...atttaaacctgtattta-----aaa---AAAA	CACCAAATCTATTG	Gaaacaagtcgattt	cat...369...ttgggtgtttg	agt	cttgg
B. Tau	cctc	catgtagctcatcac...1291...-ttaaactgtattta-----aaaa---AAAA	CACCAAATCTATTG	Gaaacaagtcgattt	catgtt...364...ttgggtgtttg	agt	ctcgg
E. Cab	tctc	catgtagctcatcac...1317...atctaacctgtcttta-----aaa---AAAA	CACCAAATCTATTG	Gaaacaagtcgattt	gttt...350...ttgggtgtttg	agt	ctcgg
S. Sus	tctc	gcagctcatcac...1343...---taaatctgtattta-----aaaaaa---AAAA	CACCAAATCTATTG	Gaaacaagtcgattt	catgtt...369...ttgggtgtttg	agt	cttgg
O. Avi	cctc	catgtagctcatcac...1292...-aaactgttaatta-----aaaaaa---AAAA	CACCAAATCTATTG	Gaaacaagtcgattt	catgttc...369...ttgggtgtttg	agt	cttgg
L. Afr	cctc	taagtagctcatcac...1357...-----ttaaataaaacaaacCAAAA	CACCAAATCTATTG	Gaaacaagtcgattt	gtttg...351...ttgggtgtttg	agt	ctcgg
		* * * * *					

id=734890 gene=ENSG0000171940 name=ZNF217 segment=chr20_52183612_52185358_-1 type=E3

H. Sap	tctc	gcagctcatcac...1692...--tgattatgatgtggaagt	TAAATATAGATTGGTGT	TTTgc	aatc	ttga
R. Mac	tctc	gcagctcatcac...1691...--tgattatgatgtggaagt	TAAATATAGATTGGTGT	TTTgc	aac	ttga
P. Tro	tttcta	gcagctcatcac...1689...--tgattatgatgtggaagt	TAAATATAGATTGGTGT	TTTgc	aat	ttga
P. Abe	tctc	gcagctcatcac...1697...--tgattatgatgtggaagt	TAAATATAGATTGGTGT	TTTgc	aat	ttga
C. Jac	tctc	gcagctcatcac...1679...--agttatgatgatgtggaagt	TAAATATAGATTGGTGT	TTTgc	aat	cttgg
M. Mus	tcctc	catggagctgcgagga...1544...-----tattatgatgtggaagt	ATAGATTGGTGT	TTTgc	agt	cttgg
C. Por	ttctc	tctggagctcaaac...1349...--gtattatgatgtggaagt	ATAGATTGGTGT	TTTgc	aat	cttgg
O. Cun	cttctc	gtgtagctcgtcgc...1439...tatgtattatgatgtggaagt	TAAATATAGATTGGTGT	TTTgc	agt	cttga
C. Fam	tctc	gcagctcatcac...1949...-----tattatgatgtggaagt	ATAGATTGGTGT	TTTgc	agt	cttgg
B. Tau	cctc	catgtagctcatcac...1684...tatgtattatgatgtggaagt	TAAATATAGATTGGTGT	TTTgc	agt	ctcgg
E. Cab	tctc	catgtagctcatcac...1696...tatgtattatgatgtggaagt	TAAATATAGATTGGTGT	TTTgc	agt	ctcgg
S. Sus	tctc	gcagctcatcac...1741...tatgtattatgatgtggaagt	TAAATATAGATTGGTGT	TTTgc	agt	cttgg
O. Avi	cctc	catgtagctcatcac...1690...tatgtattatgatgtggaagt	TAAATATAGATTGGTGT	TTTgc	agt	cttgg
L. Afr	cctc	taagtagctcatcac...1738...tatgtattatgatgtggaagt	TAAATAAGATTGGTGT	TTTgc	agt	ctcgg
		* * * * *				

id=734890 gene=ENSG0000171940 name=ZNF217 segment=chr20_52183612_52185358_-1 type=E3 VIEW

Figure 793: CS=8.4



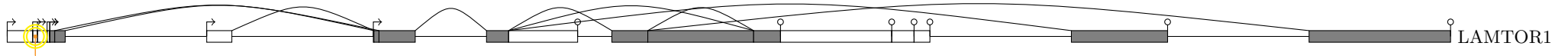
H. Sap	ttttTTAG	AacTGAGCTCT	ccatagacaacataagtag-...74...gattttttccag	gtgggta
R. Mac	ttttTTAG	AacTGAGCTCT	ccatagacaacataagtag-...74...gattttttccag	gtgggta
P. Tro	ttttTTAG	AacTGAGCTCT	ccatagacaacataagtag-...74...gattttttccag	gtgggta
P. Abe	ttttTTAG	AacTGAGCTCT	ccatagacaacataagtag-...74...gattttttccag	gtgggta
C. Jac	ttttTTAG	AacTGAGCTCT	ccatagacaacataagtag-...74...gattttttccag	gtgggta
M. Mus	ttttTTAG	AacTGAGCTCT	ccatagacacacat-agtagc...68...gattttgtccag	gtgggta
C. Por	ttttTTAG	AacTGAGCTCT	ccatagacaacataagtag-...74...gattttttccag	gtgggta
O. Cun	ttttTTAG	AacTGAGCTCT	ccatagacaacataagtag-...74...gattttttccag	gtgggta
C. Fam	ttttTTAG	AacTGAGCTCT	ccatagacaacataagtag-...74...gattttttccag	gtgggta
B. Tau	ttttTTAG	AacTGAGCTCT	ccatagacaacataagtag-...74...gattttttccag	gtgggta
E. Cab	ttttTTAG	AacTGAGCTCT	ccatagacaacataagtag-...74...gattttttccag	gtgggta
S. Sus	ttttTTAG	AacTGAGCTCT	ccatagacaacataagtag-...74...gattttttccag	gtgggta
O. Avi	ttttTTAG	AacTGAGCTCT	ccatagacaacataagtag-...74...gattttttccag	gtgggta
L. Afr	ttttTTAG	AacTGAGCTCT	ccatagacaacataagtag-...74...gattttttccag	gtgggta

id=586634 gene=ENSG0000120616 name=EPC1 segment=chr10.32562850_32562966_-1 type=AN

H. Sap	catcacag	gtgagggattt	gtctgtccttatgattatccctcattgttccacc	AGAGTTCA	TCTAA	ttaccaactg	ttgtcatag	aaccttgc
R. Mac	catcacag	gtgagggattt	gtctgtccttatgattatccctcattgttccacc	AGAGTTCA	TCTAA	ttaccaactg	ttgtcatag	aaccttgc
P. Tro	catcacag	gtgagggattt	gtctgtccttatgattatccctcattgttccacc	AGAGTTCA	TCTAA	ttaccaactg	ttgtcatag	aaccttgc
P. Abe	catcacag	gtgagggattt	gtctgtccttatgattatccctcattgttccacc	AGAGTTCA	TCTAA	ttaccaactg	ttgtcatag	aaccttgc
C. Jac	catcacag	gtgagggattt	gtctgtccttatgattatccctcattgttccacc	AGAGTTCA	TCTAA	ttaccaactg	ttgtcatag	aaccttgc
M. Mus	cgcaacag	gtgagggcctt	g--tgtcttaggattat--cctcgtt	gttccacc	AGAGTTCA	TCTAA	ttaccaagt	gttgcctag
C. Por	cttcacag	gtgagggattt	gtctgtccttatgattatccctcattgttccacc	AGAGTTCA	TCTAA	ttaccaactg	ttgtcatag	aaccttgc
O. Cun	catcacag	gtgagggattt	gtctgtccttatgattatccctcattgttccacc	AGAGTTCA	TCTAG	ttaccaactg	ttgtcatag	aaccttgc
C. Fam	ctgcacag	gtgagggattt	gtctgtccttatgattatccctcattgttccacc	AGAGTTCA	TCTAA	ttaccaactg	ttgtcatag	aaccttgc
B. Tau	tgccacag	gtgagggattt	gtctgtccttatgattatccctcattgttccacc	AGAGTTCA	TCTAA	ttaccaactg	ttgtcatag	aaccttgc
E. Cab	cttcacag	gtgagggattt	gtctgtccttatgattatccctcattgttccacc	AGAGTTCA	TCTAA	ttaccaactg	ttgtcatag	aaccttgc
S. Sus	ctgcacag	gtgagggattt	gtctgtccttatgattatccctcattgttccacc	AGAGTTCA	TCTAA	ttaccaactg	ttgtcatag	aaccttgc
O. Avi	tgccacag	gtgagggattt	gtctgtccttatgattatccctca--	tgttccacc	AGAGTTCA	TCTAA	ttaccaactg	ttgtcatag
L. Afr	cttcacag	gtgagggattt	gtctgtccttatgattatccctcattgttccacc	AGAGTTCA	TCTAA	ttaccaactg	ttgtcatag	aaccttgc

id=586638 gene=ENSG0000120616 name=EPC1 segment=chr10.32562011_32562090_-1 type=AN VIEW

Figure 794:



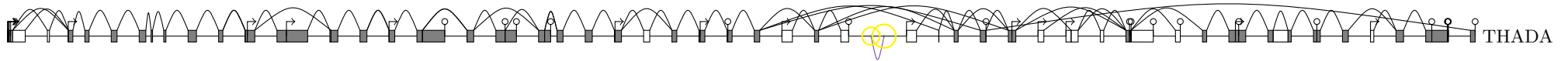
H.Sap	cggaagcc	ggggtattgact...54...--gcctgcgg-gaggcccgcg--	GGTC	ATGTGACc
R.Mac	cggaagcc	ggggtattgcct...54...--gcctgcgg-gaggcagttgcg--	GGTC	ATGTGACc
P.Tro	cggaagcc	ggggtattgact...54...--gcctgcgg-gaggcccgcg--	GGTC	ATGTGACc
P.Abe	cggaagcc	ggggtattgact...64...--gcctgcgg-gaggcagccgcg--	GGTC	ATGTGACc
M.Mus	cggaagcc	aagatttggctg...41...--gggagcga-gaggcagccgcg--	GGTC	ATGTGACc
R.Nor	cggaagcc	aagatttggctg...49...--ggggggag-gaggcagccgcg--	GGTC	ATGTGACc
C.Por	cggaagcc	ggggtttggctg...44...--gctcggg-gaggcagccgcg--	GGTC	ATGTGACc
O.Cun	cggaagcc	aggcttcggcag...43...--gcctgcgg-gaggcagctacg--	GGTC	ATGTGACc
C.Fam	cggaagcc	ggggtggcggcg...46...--gcctgctg-gctgtagccacg--	GGTC	ATGTGACc
B.Tau	cggaagct	tgggttctggcg...52...ttacttctg-gatcctg--gtg	CCGGTC	ATGTGACc
E.Cab	cggaagcc	ggggtttcgcc...55...--gcttctg-gttgcagccacg--	GGTC	ATGTGACc
S.Sus	cggatgcc	ggggttcggcg...52...--ctgtctg-gatgcagccgcg--	GGTC	ATGTGACc
L.Afr	cggaagca	gcgctacggagc...65...--cctgcggcggtgcagccacg--	GGTC	ATGTGACc
	**** *	* * *	* * *	**** *****

id=655563 gene=ENSG00000149357 name=LAMTOR1 segment=chr11.71814344.71814433.-1 type=E5

H.Sap	cgcgGGTC	ATGTGACC	ggaagggt	cctcacgg
R.Mac	tgcgGGTC	ATGTGACC	ggaagggt	cctgacgg
P.Tro	cgcgGGTC	ATGTGACC	ggaagggt	cctgacgg
P.Abe	cgcgGGTC	ATGTGACC	ggaagggt	cctgacgg
M.Mus	cgcgGGTC	ATGTGACC	ggaagggt	cctgacgg
R.Nor	cgcgGGTC	ATGTGACC	ggaagggt	cctgacgg
C.Por	cgcgGGTC	ATGTGACC	ggaagggt	cctgacgg
O.Cun	tacgGGTC	ATGTGACC	ggaagggt	cctgacgg
C.Fam	cacgGGTC	ATGTGACC	ggaagggt	cccgacgg
B.Tau	tgccGGTC	ATGTGACCGG	aagggt	cgtgacgg
E.Cab	cacgGGTC	ATGTGACC	ggaagggt	cctgacgg
S.Sus	cgcgGGTC	ATGTGACC	ggaagggt	cctgacgg
L.Afr	cacgGGTC	ATGTGACC	ggaagggt	cctgaagt
	* ****	*****	** *	* * *

id=655564 gene=ENSG00000149357 name=LAMTOR1 segment=chr11.71814327.71814343.-1 type=E5 VIEW

Figure 795: CS=14.43



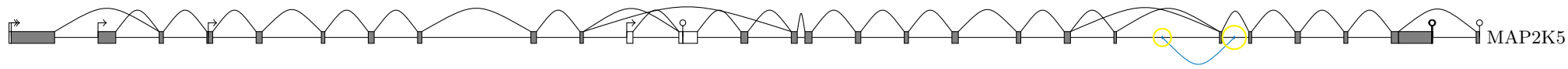
H. Sap	---atgaatc	at t t t t g t g a t g t . . . 4 5 8 1 . . .	---ataacaacatactttaaattc	CAGAACAGTAAGCAAAATAGCTT	aagttcactgacttgaaaaa- . . . 3 2 1 . . .	t g a t a c c t t t g t	g t a a t c a g
R. Mac	---aggaatc	at t t t t g t g a t g t . . . 4 5 8 1 . . .	---ataacaacatactttaaattc	CAGAACAGTAAGCAAAATAGCTT	aagttcactgacttgaaaaa- . . . 3 2 1 . . .	t g a t a c c t t t g t	g t a a t c a g
P. Tro	---atgaatc	at t t t t g t g a t g t . . . 4 5 8 1 . . .	---ataacaacatactttaaattc	CAGAACAGTAAGCAAAATAGCTT	aagttcactgacttgaaaaa- . . . 3 2 1 . . .	t g a t a c c t t t g t	g t a a t c a g
P. Abe	---atgaatc	at t t t t g t g a t g t . . . 4 5 8 2 . . .	---ataacaacatactttaaattc	CAGAACAGTAAGCAAAATAGCTT	aagttcactgacttgaaaaa- . . . 3 2 1 . . .	t g a t a c c t t t g t	g t a a t c a g
C. Jac	---aagaatc	a t t c t g t g a t g t . . . 4 5 8 2 . . .	---ataacaacatactttaaattc	CAGAACAGTAAGCAAAATAGCTT	aagttcactgacttgaaaaa- . . . 3 2 0 . . .	t g a t a c c t t t g t	g t a a t c a g
M. Mus	---ctgaacc	a t g t c t c c c a g a . . . 4 5 9 0 . . .	-----tacttaaattccagaacagt	AAGCAAATAGCTT	aagttcactgacttgaaaaa- . . . 3 2 1 . . .	t g a t a c c t t t g t	g t g a t c a g
R. Nor	---aaaaaaa	a a g t t a t g a a a t . . . 4 5 8 1 . . .	---ataacaacatactttaaattc	CAGAACAGTAAGCAAAATAGCTT	aagttcactgacttgaaaaa- . . . 3 2 1 . . .	t g a t a c c t c t g t	g t g a t c a g
C. Por	---ttgaata	c t t t t g t g a t a t . . . 4 5 8 0 . . .	ttataacaacatactttaaattc	TCCAGAACAGTAAGCAAAATAGCTT	aagttcactgacttgaaaaa- . . . 3 2 1 . . .	t g a t a c c t t t g t	g t a a t c a g
O. Cun	attgagtaaaa	g t t t t a t t a --- . . . 4 5 8 1 . . .	---ataacaacatactttaaattc	CAGAACAGTAAGCAAAATAGCTT	aagttcactgacttgaaaaa . . . 3 2 0 . . .	t g a t a c c t t t g t	g t a a t c a g
C. Fam	---atgaata	a t t t t a t g a t g c . . . 4 5 8 1 . . .	---ataacaacatactttaaattc	CAGAACAGTAAGCAAAATAGCTT	aagttcactgacttgaaaaa- . . . 3 2 1 . . .	t g a t a c c t t t g t	g t a a t c a g
B. Tau	---ttgaata	a t t g t t t g a t g c . . . 4 5 8 1 . . .	---ataacaacatactttaaattc	CAGAACAGTAAGCAAAATAGCTT	aagttcactgacttgaaaaa- . . . 3 2 1 . . .	t g a t a c c t t t g t	g t a a t c a g
E. Cab	---gtgaata	a t t t t a t g a t g c . . . 4 5 8 1 . . .	---ataacaacatactttaaattc	CAGAACAGTAAGCAAAATAGCTT	aagttcactgacttgaaaaa- . . . 3 2 1 . . .	t g a t a c c t t t g t	g t a a t c a g
S. Sus	---atgaata	a t t t t g t a a t a c . . . 4 5 8 1 . . .	---ataacaacatactttaaattc	CAGAACAGTAAGCAAAATAGCTT	aagttcactgacttgaaaaa- . . . 3 2 1 . . .	t g a t a c c t t t g t	g t a a t c a g
L. Afr	---gtgaataa	a t t t c a t g a t g c . . . 4 5 9 0 . . .	-----tacttaaattccagaacagt	AAGCAAATAGCTT	aagttcactgacttgaaaaa- . . . 3 2 1 . . .	t g a t a c c t t t g t	g t a a t c a g
	**			*****		*****	** *****

id=545456 gene=ENSG0000115970 name=THADA segment=chr2_43690399_43711416_-1 type=IN

H. Sap	---atgaatc	at t t t t g t g a t g t . . . 4 8 8 3 . . .	-agatttc	caaaggactccac	GGGCTGTTTGCTTTG	at	CTGTTTTG	agggctggctctctttatacctg	t t g g t t t g c t c t t t c t g a t a c c t t t g t	g t a a t c a g
R. Mac	---aggaatc	at t t t t g t g a t g t . . . 4 8 8 3 . . .	-agatttc	caaaggactccac	GGGCTGTTTGCTTTG	at	CTGTTTTG	agggctggctctctttatacctg	t t g g t t t g c t c t t t c t g a t a c c t t t g t	g t a a t c a g
P. Tro	---atgaatc	at t t t t g t g a t g t . . . 4 8 8 3 . . .	-agatttc	caaaggactccac	GGGCTGTTTGCTTTG	at	CTGTTTTG	agggctggctctctttatacctg	t t g g t t t g c t c t t t c t g a t a c c t t t g t	g t a a t c a g
P. Abe	---atgaatc	at t t t t g t g a t g t . . . 4 8 8 4 . . .	-agatttc	caaaggactccac	GGGCTGTTTGCTTTG	at	CTGTTTTG	agggctggctctctttatacctg	t t g g t t t g c t c t t t c t g a t a c c t t t g t	g t a a t c a g
C. Jac	---aagaatc	a t t c t g t g a t g t . . . 4 8 8 4 . . .	-agatttc	caaaggactccac	GGGCTGTTTGCTTTG	at	CTGTTTTG	agggctggctctctttatacctg	t t g g t t t g c t c - t t c t g a t a c c t t t g t	g t a a t c a g
M. Mus	---ctgaacc	a t g t c t c c c a g a . . . 4 8 8 3 . . .	-agatttc	caagagcactccac	GGGCTGTTTGCTTTG	t g a t c t g t g t g a g g c t g g t c t c t t t a t a c c t g t t g g t t g c t c t t t a t g a t a c c t t t g t				g t g a t c a g
R. Nor	---aaaaaaa	a a g t t a t g a a a t . . . 4 8 8 3 . . .	-agatttc	caagcactccac	GGGCTGTTTGCTTTG	at	CTGTTTTG	agggctggctctctttatacctg	t t g g t t t g c t c t t t a t g a t a c c t c t g t	g t g a t c a g
C. Por	---ttgaata	c t t t t g t g a t a t . . . 4 8 8 4 . . .	-agatttc	caaaggactccac	GGGCTGTTTGCTTTG	at	CTGTTTTG	agggctggctctctttatacctg	t t g g t t t g c t c t t t a t g a t a c c t t t g t	g t a a t c a g
O. Cun	attgagtaaaa	g t t t t a t t a --- . . . 4 8 8 2 . . .	aagatttc	caaaggactccac	TGGGCTGTTTGCTTTG	at	CTGTTTTG	agggctggctctctttatacctg	t t g g t t t g c t c t t t a t g a t a c c t t t g t	g t a a t c a g
C. Fam	---atgaata	a t t t t a t g a t g c . . . 4 8 8 3 . . .	-agatttc	caaaggactccac	GGGCTGTTTGCTTTG	at	CTGTTTTG	agggctggctctctttatacctg	t t g g t t t g c t a t t t a t g a t a c c t t t g t	g t a a t c a g
B. Tau	---ttgaata	a t t g t t t g a t g c . . . 4 8 8 3 . . .	-agatttc	caaaggactccac	GGGCTGTTTGCTTTG	at	CTGTTTTG	agggctggctctctttatacctg	t t g g t t c a c t a t t t a t g a t a c c t t t g t	g t a a t c a g
E. Cab	---gtgaata	a t t t t a t g a t g c . . . 4 8 8 3 . . .	-agatttc	caaaggactccac	GGGCTGTTTGCTTTG	at	CTGTTTTG	agggctggctctctttatacctg	t t g c t t t g c t a t t t a t g a t a c c t t t g t	g t a a t c a g
S. Sus	---atgaata	a t t t t g t a a t a c . . . 4 8 8 3 . . .	-agatttc	caaaggactccac	GGGCTGTTTGCTTTG	at	CTGTTTTG	agggctggctctctttatacctg	t t g g t t t g c t a t t t a t g a t a c c t t t g t	g t a a t c a g
L. Afr	---gtgaataa	a t t t c a t g a t g c . . . 4 8 8 3 . . .	-agatttc	caaaggactccac	GGGCTGTTTGCTTTG	t g a t c t g t t a g a g g c t g g t c t c t t t a t a c c t g t t g g t t t g c t a t t t a t g a t a c c t t t g t				g t a a t c a g
	**			*****		*	*	*****	** *****	** *****

id=545456 gene=ENSG0000115970 name=THADA segment=chr2_43690399_43711416_-1 type=IN VIEW

Figure 796:



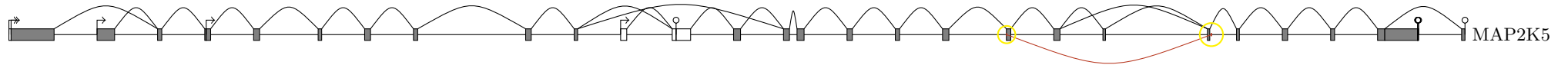
H. Sap	atcctcag	gtaagattgttc...4717...aatggattatggtttttctc	CCTAT	TCTAATACA	acctggagggtactaaaaag...194...gccttttttcag	attcagaa
R. Mac	atcctcag	gtaagattgttc...4717...aatggattatggtttttctc	CCTAT	TCTAATACA	acctggagggtactaaaaag...194...gccttttttcag	attcagaa
P. Tro	atcctcag	gtaagattgttc...4717...aatggattatggtttttctc	CCTAT	TCTAATACA	acctggagggtactaaaaag...194...gccttttttcag	attcagaa
P. Abe	atcctcag	gtaagattgttc...4717...aatggattatggtttttctc	CCTAT	TCTAATACA	acctggagggtactaaaaag...194...gccttttttcag	attcagaa
C. Jac	atcctcag	gtaagattgttc...4717...aatggattatggtttttctc	CCTAT	TCTAATACA	acctggagggtactaaaaag...194...gccttttttcag	attcagaa
M. Mus	atcctcag	gtaagattgttc...4717...aatggattatggtttttctc	CCTAT	TCTAATACA	acctggagggtactaaaaag...194...gccttttttcag	attcagaa
R. Nor	atcctcag	gtaagattgttc...4717...aatggattatggtttttctc	CCTAT	TCTAATACA	acctggagggtactaaaaag...194...gccttttttcag	attcagaa
C. Por	atcctcag	gtaagattgttc...4717...aatggattatggtttttctc	CCTAT	TCTAATACA	acctggagggtactaaaaag...194...gccttttttcag	attcagaa
O. Cun	atcctcag	gtaagattgttc...4717...aatggattatggtttttctc	CCTAT	TCTAATACA	acctggagggtactaaaaag...194...gccttttttcag	attcagaa
C. Fam	atcctcag	gtaagattgttc...4717...aatggattatggtttttctc	CCTAT	TCTAATACA	acctggagggtactaaaaag...194...gccttttttcag	attcagaa
F. Cat	atccccag	gtaagattgttc...4717...aatggattatggtttttctc	CCTAT	TCTAATACA	acctggagggtactaaaaag...194...gccttttttcag	attcagaa
B. Tau	atcctcag	gtaagattgttc...4717...aatggattatggtttttctc	CCTAT	TCTAATACA	acctggagggtactaaaaag...194...gccttttttcag	attcagaa
E. Cab	atcctcag	gtaagattgttc...4717...aatggattatggtttttctc	CCTAT	TCTAATACA	acctggagggtactaaaaag...194...gccttttttcag	attcagaa
L. Afr	atcctcag	gtaagattgttc...4717...aatggattatggtttttctc	CCTAT	TCTAATACA	acctggagggtactaaaaag...194...gccttttttcag	attcagaa
	**** **	*****	*****	*****	*****	*****

id=373521 gene=ENSG00000137764 name=MAP2K5 segment=chr15_68020284_68040568.1 type=IN

H. Sap	ctttaatg	gtaagctttatg...97...aatgcaaacctttaactgcc	TGTATTAGAT	TAGG	taccattagaataatagaa...136...tttcattgcag	cctctcca
R. Mac	ctttaatg	gtaagctttatg...97...aatgcaaacctttaactgcc	TGTATTAGAT	TAGG	taccattagaataatagaa...136...tttcattgcag	cctctcca
P. Tro	ctttaatg	gtaagctttatg...97...aatgcaaacctttaactgcc	TGTATTAGAT	TAGG	taccattagaataatagaa...136...tttcattgcag	cctctcca
P. Abe	ctttaatg	gtaagctttatg...97...aatgcaaacctttaactgcc	TGTATTAGAT	TAGG	taccattagaataatagaa...136...tttcattgcag	cctctcca
C. Jac	ctttaatg	gtaagctttatg...97...aatgcaaacctttaactgcc	TGTATTAGAT	TAGG	taccattagaataatagaa...136...tttcattgcag	cctctcca
M. Mus	ctttaatg	gtaagctttatg...98...aatgcaaacctttaactgcc	TGTATTAGAT	TAGG	taccattagaataatagaa...137...tccccattgcag	cctctcca
R. Nor	ctttaatg	gtaagctttatg...98...aatgcaaacctttaactgcc	TGTATTAGAT	TAGG	taccattagaataatagaa...136...tccccattgcag	cctctcca
C. Por	ctttaatg	gtaagctttatg...97...aatgcaaacctttaactgcc	TGTATTAGAT	TAGG	taccattagaataatagaa...136...tttcattgcag	cctctcca
O. Cun	ctttaatg	gtaagctttatg...97...aatgcaaacctttaactgcc	TGTATTAGAT	TAGG	taccattagaataatagaa...134...tttcattgcag	cctctcca
C. Fam	ctttaatg	gtaagctttatg...97...aatgcaaacctttaactgcc	TGTATTAGAT	TAGG	taccattagaataatagaa...136...tccccattgcag	cctctcca
F. Cat	ctttaatg	gtaagctttatg...97...aatgcaaacctttaactgcc	TGTATTAGAT	TAGG	taccattagaataatagaa...137...tccccattgcag	cctctcca
B. Tau	ctttaatg	gtaagctttatg...97...aatgcaaacctttaactgcc	TGTATTAGAT	TAGG	taccattagaataatagaa...136...tccccattgcag	cctctcca
E. Cab	ctttaatg	gtaagctttatg...97...aatgcaaacctttaactgcc	TGTATTAGAT	TAGG	taccattagaataatagaa...136...tccccattgcag	cctctcca
L. Afr	ctttaatg	gtaagctttatg...97...aatgcaaacctttaactgcc	TGTATTAGAT	TAGG	taccattagaataatagaa...136...tttcattgtag	cctctcca
	*****	*****	*****	*	* ** * **	*****

id=373523 gene=ENSG00000137764 name=MAP2K5 segment=chr15_68040596_68040906.1 type=IN VIEW

Figure 797:



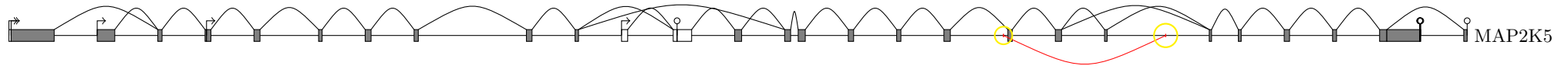
H. Sap	gcactcag	gtatgtctcttt...920...tatattgttctaacagactg	TTTTGtCTCATAG	CTggtgaa
R. Mac	gcactcag	gtatgtcccttt...920...tatattgttctaacagactg	TTTTGtCTCATAG	CTggtgaa
P. Tro	gcactcag	gtatgtctcttt...920...tatattgttctaacagactg	TTTTGtCTCATAG	CTggtgaa
P. Abe	gcactcag	gtatgtctcttt...920...tatattgttctaacagactg	TTTTGtCTCATAG	CTggtgaa
C. Jac	gcactcag	gtatgtctcttt...916...tatattgttctaacagactg	TTTTGtCTCATAG	CTggtgaa
M. Mus	gcacacag	gtaggctctttt...874...tatattgttctaacagaccg	TTTTGtCTCATAG	CTggtgaa
R. Nor	gcaccag	gtaggctctttc...872...tatattgttctaacagaccg	TTTTGtCTCATAG	CTggtgaa
C. Por	gcactcaa	gtaggctctttt...914...tatattgttctaacagactg	TTTTGtCTCATAG	CTggtgaa
O. Cun	gcaccag	gtaggctcctct...890...atattgttctaacagactgc	TTTTGtCTCATAG	CTggtgaa
C. Fam	gcactcag	gtgggtctcttt...921...tatattgttctaacagactg	TTTTGtCTCATAG	CTggtgaa
B. Tau	gcactcag	gtaggctctctt...917...tatattgttctaacagactg	TTTTGtCTCATAG	CTggtgaa
E. Cab	gcactcag	gtaggctctctt...920...tatattgttctaacagactg	TTTTGtCTCATAG	CTggtgaa
L. Afr	gcactcag	gtgggtctcttt...920...tatattgttctaacagactg	TTTTGtCTCATAG	CTggtgaa
	**** **	** *** *	***** ***** * *****	*****

id=373515 gene=ENSG00000137764 name=MAP2K5 segment=chr15_67984891_67985855_1 type=IN

H. Sap	ctttaatg	gtaAGCTttATGAGttCAGAA-aaaaattcacttttctttt...258...tttcattgcag	cctctcca
R. Mac	ctttaatg	gtaAGCTttATGAGttCAGAA-aaaaattcacttttctttt...258...tttcattgcag	cctctcca
P. Tro	ctttaatg	gtaAGCTttATGAGttCAGAA-aaaaattcacttttctttt...258...tttcattgcag	cctctcca
P. Abe	ctttaatg	gtaAGCTttATGAGttCAGAA-aaaaattcacttttctttt...258...tttcattgcag	cctctcca
C. Jac	ctttaatg	gtaAGCTttATGAGttCAGAA-aaaaattcacttttctttt...258...tttcattgcag	cctctcca
M. Mus	ctttaatg	gtaAGCTttATGAGttCAGAAaaaaaattcacttttctttt...260...tcccattgcag	cctctcca
R. Nor	ctttaatg	gtaAGCTttATGAGttCAGAAaaaaaattcacttttctttt...259...tcccattgcag	cctctcca
C. Por	ctttaatg	gtaAGCTttATGAGttCAGAA-aaaaattcacttttctttt...258...tttcattgcag	cctctcca
O. Cun	ctttaatg	gtaAGCTttATGAGttCAGAA-aaaaaattcacttttctttt...257...tttcattgcag	cctctcca
C. Fam	ctttaatg	gtaAGCTttATGAGttCAGAA-aaaaattcacttttctttt...258...tcccattgcag	cctctcca
B. Tau	ctttaatg	gtaAGCTttATGAGttCAGAA-aaaaattcacttttctttt...258...tcccattgcag	cctctcca
E. Cab	ctttaatg	gtaAGCTttATGAGttCAGAA-aaaaattcacttttctttt...258...tcccattgcag	cctctcca
L. Afr	ctttaatg	gtaAGCTttATGAGttCAGAA-aaaaattcacttttctttt...258...tttcattgtag	cctctcca
	*****	*****	* **** * ** *****

id=373523 gene=ENSG00000137764 name=MAP2K5 segment=chr15_68040596_68040906_1 type=IN VIEW

Figure 798:



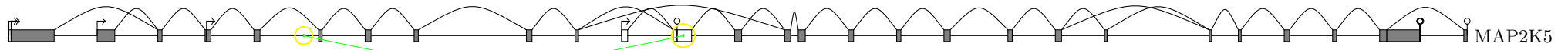
H.Sap	gcactcag	gtatgtctcttt...866...	--gatgattgtaggttaaata	GGAATaATTGccCATT	ttattccacattatctttatattgttctaacagactgtttgtctcatag	ctggtgaa
R.Mac	gcactcag	gtatgtcccttt...866...	--gatgattgtaggttaaata	GGAATaATTGccCATT	ttattccacattatctttatattgttctaacagactgtttgtctcatag	ctggtgaa
P.Tro	gcactcag	gtatgtctcttt...866...	--gatgattgtaggttaaata	GGAATaATTGccCATT	ttattccacattatctttatattgttctaacagactgtttgtctcatag	ctggtgaa
P.Abe	gcactcag	gtatgtctcttt...866...	--gatgattgtaggttaaata	GGAATaATTGccCATT	ttattccacattatctttatattgttctaacagactgtttgtctcatag	ctggtgaa
C.Jac	gcactcag	gtatgtctcttt...862...	--gatgattgtaggttaaata	GGAATaATTGccCATT	ttattccacattatctttatattgttctaacagactgtttgtctcatag	ctggtgaa
M.Mus	gcacacag	gtaggtcctttt...818...	gcgctgattgtaggttaaata	GGGGAATaATTGccCATT	ttattccacattatctttatattgttctaacagaccgtttgtctcatag	ctggtgaa
R.Nor	gcaccag	gtaggtcctttt...816...	gtgctgattgtaggttaaata	GGGGAATaATTGccCATT	ttattccacattatctttatattgttctaacagaccgtttgtctcatag	ctggtgaa
C.Por	gcactcaa	gtaggtcctttt...860...	--gatgattgtaggttaaata	GGAATaATTGccCATT	ttattccacattatctttatattgttctaacagactgtttgtctcatag	ctggtgaa
O.Cun	gcaccag	gtaggtccctct...835...	--gatgattgtaggttaaata	AGAATaATTGccCATT	ttattccacattatctttatattgttctaacagactgctttgtctcatag	ctggtgaa
C.Fam	gcactcag	gtgggtccttt...867...	--gatgattgtaggttaaata	GGAATaATTGccCATT	ttattccacattatctttatattgttctaacagactgtttgtctcatag	ctggtgaa
B.Tau	gcactcag	gtaggtccttt...863...	--gatgattgtaggttaaata	GGAATaATTGccCATT	ttattccacattatctttatattgttctaacagactgtttgtctcatag	ctggtgaa
E.Cab	gcactcag	gtaggtccttt...864...	atgatgattgtaggttaaata	GGGGAATaATTGccCATT	ttattccacattatctttatattgttctaacagactgtttgtctcatag	ctggtgaa
L.Afr	gcactcag	gtgggtccttt...866...	--gatgatgtaggttaaata	GGAATaATTGccCATT	ttattccacattatctttatattgttctaacagactgtttgtctcatag	ctggtgaa
	**** **	** *** *		**** *****	*****	*****

id=373515 gene=ENSG00000137764 name=MAP2K5 segment=chr15_67984891_67985855_1 type=IN

H.Sap	atcctcag	gtaagattgttc...4869...	gccacaaattgccaccagc	AATGCAATaATTTT	ctctcagtgatcataatgtg--...42...gcctttttcag	attcagaa
R.Mac	atcctcag	gtaagattgttc...4869...	gccacaaattgccaccagc	AATGCAATaATTTT	ctctcagtgatcataatgtg--...42...gcctttttcag	attcagaa
P.Tro	atcctcag	gtaagattgttc...4869...	gccacaaattgccaccagc	AATGCAATaATTTT	ctctcagtgatcataatgtg--...42...gcctttttcag	attcagaa
P.Abe	atcctcag	gtaagattgttc...4869...	gccacaaattgccaccagc	AATGCAATaATTTT	ctctcagtgatcataatgtg--...42...gcctttttcag	attcagaa
C.Jac	atcctcag	gtaagattgttc...4869...	gccacaaattgccaccagc	AATGCAATaATTTT	ctctcagtgatcataatgtg--...42...gcctttttcag	attcagaa
M.Mus	atcctcag	gtaagattgttc...4869...	gccacaaattgccaccagc	AATGCAATaATTTTCT	ctcagtgatcataatgtg--...40...gcctttttcag	attcagaa
R.Nor	atcctcag	gtaagattgttc...4869...	gccacaaattgccaccagc	AATGCAATaATTTTCT	ctcagtgatcataatgtg--...40...gcctttttcag	attcagaa
C.Por	atcctcag	gtaagattgttc...4869...	gccacagattgccaccagc	AATGCAATaATTTT	ctctcagtgatcataatgtg--...42...gcctttttcag	attcagaa
O.Cun	atcctcag	gtaagattgttc...4869...	gccacaaattgccaccagc	AATGCAATaATTTT	ctctcagtgatcataatgtg--...42...gcctttttcag	attcagaa
C.Fam	atcctcag	gtaagattgttc...4869...	gccacaaattgccaccagc	AATGCAATaATTTT	ctctcagtgatcataatgtg--...42...gcctttttcag	attcagaa
B.Tau	atcctcag	gtaagattgttc...4869...	gccacaaattgccaccagc	AATGCAATaATTTT	ctctcagtgatcataatgtg--...42...gcctttttcag	attcagaa
E.Cab	atcctcag	gtaagattgttc...4869...	gccacaaattgccaccagc	AATGCAATaATTTTCT	ctcagtgatcataatgtg--...40...gcctttttcag	attcagaa
L.Afr	atcctcag	gtaagattgttc...4869...	gccacaaattgccaccagc	AATGCAATaATTTT	ctctcagtgatcataatgtg--...42...gcctttttcag	attcagaa
	*****	*****		***** *****	*****	*****

id=373521 gene=ENSG00000137764 name=MAP2K5 segment=chr15_68020284_68040568_1 type=IN VIEW

Figure 799:



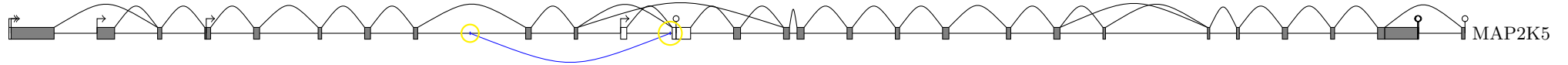
H. Sap	tccaagag	gtaatg	ttgggagccacttttcaatc	ATTCTCTC	TGCTAATTT	tggtgtcacccctcatttctt...	62...	ttactgtttcag	cctgcaag
R. Mac	tccaagag	gtaatg	ttgggagccacttttcaatc	ATTCTCTC	TGCTAATTT	tggtgtcacccctcatttctt...	62...	ttactgtttcag	cctgcaag
P. Tro	tccaagag	gtaatg	ttgggagccacttttcaatc	ATTCTCTC	TGCTAATTT	tggtgtcacccctcatttctt...	62...	ttactgtttcag	cctgcaag
P. Abe	tccaagag	gtaatg	ttgggagccacttttcaatc	ATTCTCTC	TGCTAATTT	tggtgtcacccctcatttctt...	62...	ttactgtttcag	cctgcaag
C. Jac	tccaagag	gtaatg	ttgggagccacttttcaatc	ATTCTCTC	TGCTAATTT	tggtgtcacccctcatttctt...	62...	ttactgtttcag	cctgcaag
M. Mus	tccaagag	gtaatg	ctggggccacttttcaatc	ATTCTCTC	TGCTAATTT	tggtgtcacccctcatttctt...	62...	ttactgtttcag	cctgcaag
R. Nor	tccaagag	gtaatg	ttggggccacttttcaatc	ATTCTCTC	TGCTAATTT	tggtgtcacccctcatttctt...	62...	ttactgtttcag	cctgcaag
C. Por	tccaagag	gtaatg	ttgggggactacttttcaatc	ATTCTCTC	TGCTAATTT	tggtgtcacccctcatttctt...	62...	ttactgtttcag	cctgcaag
O. Cun	tccaagag	gtaatg	ttggggactacttttcaatc	ATTCTCTC	TGCTAATTT	tggtgtcacccctcatttctt...	62...	ttactgtttcag	cctgcaag
C. Fam	tccaagag	gtaatg	ttggggccacttttcaatc	ATTCTCTC	TGCTAATTT	tggtgtcacccctcatttctt...	62...	ttactgtttcag	cctgcaag
F. Cat	tccaagag	gtaatg	ttggggccacttttcaatc	ATTCTCTC	TGCTAATTT	tggtgtcacccctcatttctt...	62...	ttactgtttcag	cctgcaag
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E. Cab	tccaagag	gtaatg	ttggggccacttttcaatc	ATTCTCTC	TGCTAATTT	tggtgtcacccctcatttctt...	62...	ttactgtttcag	cctgcaag
O. Avi	tccaagag	gtaatg	ttggggccacttttcaatc	ATTCTCTC	TGCTAATTT	tggtgtcacccctcatttctt...	62...	ttactgtttcag	cctgcaag
L. Afr	tccaagag	gtaatg	ctggggccacttttcaatc	ATTCTCTC	TGCTAATTT	tggtgtcacccctcatttctt...	62...	ttactgtttcag	cctgcaag
	*****	*****	*** *	*****	*****	*****	*****	*****	*****

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P. Abe	ccatgaca	gcttgtgatgaattg	ccgtatttatactgtatattt	taagcctcacactaattt	AAATTgAGCAcAGAGtAAAT	tataattcagtcacttgact...	61...	aaatgcactaag	gtatttca
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M. Mus	ccatgaca	gctcgtgatgaattg	ccgtatttatactgtatattt	taagcctcacactaattt	AAATTgAGCAcAGAGtAAAT	tataattcagtcacttgact...	74...	gaatgcaggcag	ggacctcc
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C. Por	ccatgaca	gcttgtgatgaattg	ccgtatttatactgtatattt	taagcctcacactaattt	AAATggAGCAcAGAGtAAAT	tataattcagtcacttgact...	61...	aaatgcactcag	gtatttca
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O. Avi	ccatgaca	gcttgtgatgaattg	ccgtatttatactgtatattt	taagcctcacactaattt	AAATTgAGCAcAGAGtAAAT	tataattcagtcacttgact...	61...	aaatgcactcag	gtatttca
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Figure 800:



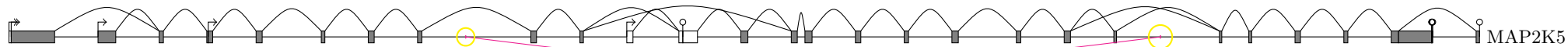
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P. Abe atggccaggtaggtattatt...4802...cccttggtatcgtctttatAAATTggACAGCAAATggttgattgatcttctcggt...107...tttcttgaggagatgaatga
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C. Jac gtcaagtggctgttgacc...735...taaaacagaatagcggccttaATTGacCTGTGATTTtgctctcctcccttttagtgaagtgt
M. Mus aggcagtggtctattggacc...718...taaaacagaatagtggttctaATTGacCTGTGATTTgttctccttgcccttttagtagagcgc
R. Nor agtcagtggtcaattgacc...717...taaaacagaatagcggccttaATTGacCTGTGATTTgttctccttggccttttagtagagcgc
C. Por gccaaagtgcctcagtggaacc...760...taaaacagaatagcggccttaATTGacCTGTGATTTtgctctcctcccttttagtggcgcgt
C. Fam gccaaagtgcagttggacc...742...taaaacagaatagaggccttaATTGacCTGTGATTTtgctctcctcccttttagtgcagcgt
F. Cat gccaaagtggcagttggacc...893...taaaacagaatagaggccttaATTGacCTGTGATTTtgctctcctcccttttagtggagcgt
B. Tau gtcaaatgatcattttcacc...783...taaaacagaatagcagcttaATTGacCTGTGATTTtgctctcctcccttttagtggagcgt
E. Cab gttaagtggcagttggacc...744...taaaacagaatagcggccttaATTGacCTGTGATTTtgctctcctcccttttagtggagcgt
S. Sus gtcaagtggcatttggatc...772...taaaatagaatagcagcttaATTGacCTGTGATTTtgctctcctcccttttagtggagcct
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L. Afr gttaagtggcagtaggacc...763...taaaacagaatagcggccttaATTGacCTGTGATTTtgctctcctcccttttagtggagcgt
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Figure 801: CS=3.9



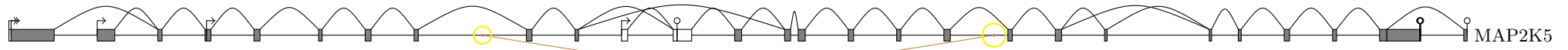
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P. Abe	atggccag	gtaggtattatt...4698...acccctttgagctatgttat	AT	CATTCCATTTGA	-----cacctttatcaaactttaa	...212...tttctgtggag	atgaatga
C. Jac	atggccag	gtaggtattaat...4698...acccctttgagctatgttat	AT	CATTCCATTTGA	-----cacctttatcaaactttaa	...212...tttctgtggag	atgaatga
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F. Cat	atggccag	gtaggtgtcatt...4603...gtcttccaagtttgatttGGTTATgTGCAGTGCTGttTGGCA			--ttggtatgtgtagtgtctag	...298...tttctcatggag	atgaatga
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P. Tro	atcctcag	gtaagattgttc...4693...tctgaatcataaacagcctt	-----TTGAAATGGAttATGGT	ttttctccct-attctaatac	...215...gcctttttcag	atcagaa
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C. Por	atcctcag	gtaagattgttc...4693...tctgaatcgtaaacagcctt	-----TTGAAATGGAttATGGT	ttttctccct-attctaatac	...215...gcctttttcag	atcagaa
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id=373521 gene=ENSG00000137764 name=MAP2K5 segment=chr15_68020284_68040568_1 type=IN VIEW

Figure 802:



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P. Tro	atggccag	gtaggtattatt...4937...-----agc-atgacacccttttggtt- TTTCTTT c TTTCTT g TGGA	-----gatgaatga
P. Abe	atggccag	gtaggtattatt...4937...-----agc-atgacacccttttggtt- TTTCTTT c TTTCTT g TGGA	-----gatgaatga
C. Jac	atggccag	gtaggtattaat...4937...-----agc-atgacacccttttggtt- TTTCTTT c TTTCT g TGGA	-----gatgaatga
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R. Nor	acggccag	gtaggtattggt...4702...cttctgagctatg-----ttatata TTCCATTTTGACACCT tttatcaaacctttaatgaaatgaccaggcaacaattg:::acccttttgttttctttcttcttctgtggagatgaatga	-----gatgaatga
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O. Cun	atggccag	gtaggtgttgtt...4931...atccacagc-atgacaccctt- TTTG tt TTTCTTT c TTTCT g TGGA	-----gatgaatga
C. Fam	atggtcag	gtaggtatcatt...4937...-----agc-atgacacccttttggtt- TTTCTTT c TTTCT g TGGA	-----gatgaatga
B. Tau	atggccag	gtaggtttcatt...4701...cttttgagctatg-----ttatata TTCCATTTTGACACCT tttatcaaacctttaatgaaatgaccaggcaacaattg:::acccttttgttttctttcttcttctgtggagatgaatga	-----gatgaatga
E. Cab	atggccag	gtaggtgtcatt...4937...-----agc-atgacacccttttggtt- TTTCTTT c TTTCTT g TGGA	-----gatgaatga
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O. Avi	atggccag	gtaggtttcatt...4937...-----agc-atgacacccttttggtt- TTTCTTT c TTTCTT g TGGA	-----gatgaatga
L. Afr	atggccag	gtaggtgtcatt...4937...-----cagc-atgacacc--ttttggt- TTTCTTT c TTTCTT g TGGA	-----gatgaatga

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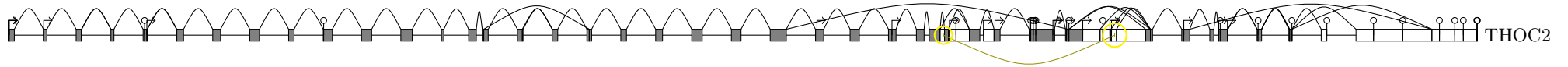
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C. Por	gcactcaa	gtaggtctcttt...750...tgttta-aattggaaatcaca TTCA a AAGAAAAGAGAGA -ttaa	atcatttttattgcct-----...127...ttgtctcatag	ctggtgaa
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E. Cab	gcactcag	gtaggtctcttt...756...tgttta-aattggaaatcaca TTCA a AAGAAAAGAGAGA -ttaa	atcatttttattgcct-----...127...ttgtctcatag	ctggtgaa
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L. Afr	gcactcag	gtgggtctcttt...756...tgttta-aattggaaatcaca TTCA a AAGAAAAGAGAGA -ttaa	atcatttttattgcct-----...127...ttgtctcatag	ctggtgaa

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Figure 803:



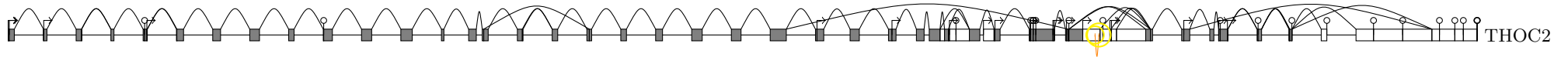
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P. Tro	gctatggg	gtaaca-aaattatattttaatgtgatttacaagactagatgaca	GAAGgATTCTGAAG	actttaaaatgttttacag	tgttgaag
P. Abe	gctatggg	gtaaca-aaatttattttaatgtgatttacaagactagatgaca	GAAGgATTCTGAAG	actttaaaatgttttacag	tgttgaag
C. Jac	gctatggg	gtaaca-aaattatattttaatgtgatttacaagactagatgaca	GAAGgATTCTGAAG	actttaaaatgttttacag	tgttgaag
C. Por	gctatggg	gtaaca-aaattatactttaatgtaattgtgagaaatagatgaca	GAAGgATTCTGAAG	actttaaaatgttttacag	tgttgaag
O. Cun	gctatggg	gtaaca-aaattatactttaatgtgattatgagattagatgaca	GAAGgATTCTGAAG	acttgaaaatgttttacag	tgttgaag
C. Fam	gctatggg	gtaaca-caattatactttaatgtgattatgagactagatgaca	GAAGgATTCTGAAG	actttaaaatgttttacag	tgttgaag
F. Cat	gctatggg	gtaaca-caattatactttaatgtgattatgagactagatgaca	GAAGgATTCTGAAG	actttaaaatgttttacag	tgttgaag
B. Tau	gctatggg	gtaaca-gaattatactttaatgtgattatgagactagattaca	GAAGgATTCTGAAG	actctaaaatgttttacag	tgttgaag
E. Cab	gctatggg	gtaaca-caattatactttaatgtgattatgagactagatgaca	GAAGgATTCTGAAG	actttaaaatgttttacag	tgttgaag
S. Sus	gctatggg	gtaacacaaattatactttaatgtgattatgagactagattaca	GAAGgATTCTGAAG	actttaaaatgttttacag	tgttgaag
L. Afr	gctatggg	gtaaca-taatcttactttaaagtgtctttagagactagatgac	CGAAGgATTCTGAAG	actttaaaatgttttacag	tgttgaag
	*****	***** ** ** ***** ** ** ** **	*****	*****	*****

id=460974 gene=ENSG00000125676 name=THOC2 segment=chrX.122757561.122757637_-1 type=AN

H. Sap	tagccatt	ccttgctccatatttaattttaattcctaaagtcacata	TTTCAtgGAATCTTT	gaatttgcagtacgttgaacttttaaaaaact	gtaagtta
R. Mac	tagccatt	ccttgctccatatttaattttaattcctaaagtcacata	TTTCAtgGAATCTTT	gaatttgcagtacgttgaacttttaaaaaact	gtaagtta
P. Tro	tagccatt	ccttgctccatatttaattttaattcctaaagtcacata	TTTCAtgGAATCTTT	gaatttgcagtacgttgaacttttaaaaaact	gtaagtta
P. Abe	tagccatt	ccttgctccatatttaattttaattcctaaagtcacata	TTTCAtgGAATCTTT	gaatttgcagtacgttgaacttttaaaaaact	gtaagtta
C. Jac	tagccatt	ccttgctccacatttaattttaattcctaaagtcacata	TTTCAtgGAATCTTT	gaatttgcagtacgttgaacttttaaaaaact	gtaagtta
C. Por	tagccatt	ccttgctccatatttaattttaattcctaaagtcacata	TTTCAtgGAATCTTT	gaatttgcagtacgttgaactttt--aaaact	gtaagtta
O. Cun	tagccatt	ccttgctccatatttaattttaattcctaaagtcacata	TTTCAtgGAATCTTT	gaatttgcagtacgttgaactttt--aaaact	gtaagtta
C. Fam	tagccatt	ccttgctccatatttaattttaattcctaaagtcacata	TTTCAtgGAATCTTT	gaatttgcagtacgttgaactttt--aaaact	gtaagtta
F. Cat	tagccatt	ccttgctccatatttaattttaattcctaaagtcacata	TTTCAtgGAATCTTT	gaatttgcagtacgttgaactttt--aaaact	gtaagtta
B. Tau	tagccatt	ccttgctccatatttaattttaattcctaaagtcacata	TTTCAtgGAATCTTT	gaatttgcagtacgttgaactttt--aaacct	gtaagtta
E. Cab	tagccatt	ccttgctccatatttaattttaattcctaaagtcacata	TTTCAtgGAATCTTT	gaatttgcagtacgttgaactttt--aaaact	gtaagtta
S. Sus	tagccatt	ccttgctccatatttaattttaattcctaaagtcacata	TTTCAtgGAATCTTT	gaatttgcagtacgttgaactttt--aaacct	gtaagtta
L. Afr	tagccatt	ccttgctccatatttaattttaattcctaaagtcacata	TTTCAtgGAATCTTT	gaatttgcagtacactgaactttt--aaaact	gtaagtta
	*****	* ***** *****	*****	*****	*****

id=461004 gene=ENSG00000125676 name=THOC2 segment=chrX.122753944.122754029_-1 type=AN VIEW

Figure 804:



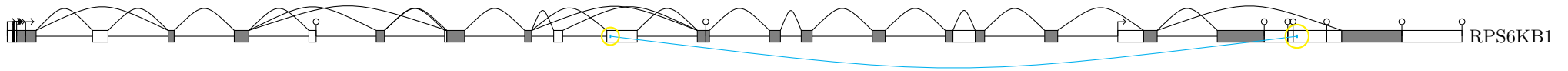
H. Sap	gtttcaaa	gtgcaagagaaa...164...ctgaattc---aagcttccttgat	GAGCATCA	CCGA	tgtgtgccttctaagaagga--...54...tgtgtatattca	gtgagcat
R. Mac	gtttcaaa	gtgcaagagaaa...164...ctgaattc---aagcttccttgat	GAGCATCA	CCGA	tgtgtgccttctaagaagga--...54...tgtgtatattca	gtgagcat
P. Tro	gtttcaaa	gtgcaagagaaa...164...ctgaattc---aagcttccttgat	GAGCATCA	CCGA	tgtgtgccttctaagaagga--...54...tgtgtatattca	gtgagcat
P. Abe	gtttcaaa	gtgcaagagaaa...164...ctgaattc---aagcttccttgat	GAGCATCA	CCGA	tgtgtgccttctaagaagga--...54...tgtgtatattca	gtgagcat
C. Jac	gtttcaaa	gtgcaagagaaa...164...ctgaattc---aagcttccttgat	GAGCATCA	CCGA	tgtgtgccttctaagaagga--...54...tgtgtatattca	gtgagcat
S. Por	gtttcaaa	gtacaagagaaa...170...---aatttatcaagcttccttgat	GAGCATCA	CCGA	--tgtgccttctaagaaggagt...52...tgtgtatattca	gtgagcat
O. Cun	gtttcaaa	gtgcaagagaaa...170...---aattcatcaagcttccttgat	GAGCATCA	CCGA	--tgtgccttctaagaaggaat...52...tgtgtatattca	gtgagcat
C. Fam	gtttcaaa	gtgcaagagaaa...170...---aattcatcaagcttccttgat	GAGCATCA	CCGA	tgtgtgccttctaagaagga--...54...tgtgtatattca	gtgagcat
F. Cat	gtttcaaa	gtgcaagagaaa...170...---aattcatcaagcttccttgat	GAGCATCA	CCGA	tgtgtgccttctaagaagga--...54...tgtgtatattca	gtgagcat
B. Tau	gtttcaaa	gtgcaagagaaa...171...---aattcatcaagcttccttgat	GAGCATCA	CCGA	tgtgtgccttctaagaagga--...54...tgtgtatattca	gtgagcat
E. Cab	gtttcaaa	gtgcaagagaaa...170...---aattcatcaagcttccttgat	GAGCATCA	CCGA	tgtgtgccttctaagaagga--...54...tgtgtatattca	gtgagcat
S. Sus	atttcaaa	gtgcaagagaaa...170...---aattcatcatgcttccttgat	GAGCATCA	CCGA	tgtgtgccttctaagaagga--...54...tgtgtatattca	gtgagcgt
O. Avi	gtttcaaa	gtgcaagagaaa...171...---aattcatcaagcttacttgat	GAGCATCA	CCGA	tgtgtgccttctaagaagga--...54...tgtgtatattca	gtgngcat
L. Afr	gtttcaaa	gtacaagagaaa...171...---aattcatcaagcttccttgat	GAGCATCA	CCGA	tgtgtgccttctaagaagga--...55...tgtgtgtattga	gtgagcat
	*****	** *****	***	* ** *****	*****	**** * ** * * *

id=460999 gene=ENSG00000125676 name=THOC2 segment=chrX.122754226_122754521_-1 type=AN

H. Sap	gtttcaaa	gtgcaagagaaa...229...agttccattttaaagtctcc	TTGGTGAT	caGTTTC	cctgtagttgtgtatattca	gtgagcat
R. Mac	gtttcaaa	gtgcaagagaaa...229...agttccattttaaagtctcc	TTGGTGAT	caGTTTC	cctgtagttgtgtatattca	gtgagcat
P. Tro	gtttcaaa	gtgcaagagaaa...229...agttccattttaaagtctcc	TTGGTGAT	caGTTTC	cctgtagttgtgtatattca	gtgagcat
P. Abe	gtttcaaa	gtgcaagagaaa...229...agttccattttaaagtctcc	TTGGTGAT	caGTTTC	cctgtagttgtgtatattca	gtgagcat
C. Jac	gtttcaaa	gtgcaagagaaa...229...agttccattttaaagtctcc	TTGGTGAT	caGTTTC	cctgtagttgtgtatattca	gtgagcat
S. Por	gtttcaaa	gtacaagagaaa...233...agttccattttaaagtctcc	TTGGTGAT	caGTTTC	cctgtagttgtgtatattca	gtgagcat
O. Cun	gtttcaaa	gtgcaagagaaa...233...agttccattttaaagtctcc	TTGGTGAT	caGTTTC	cctgtagttgtgtatattca	gtgagcat
C. Fam	gtttcaaa	gtgcaagagaaa...235...agttccattttaaagtctcc	TTGGTGAT	caGTTTC	cctgtagttgtgtatattca	gtgagcat
F. Cat	gtttcaaa	gtgcaagagaaa...235...agttccattttaaagtctcc	TTGGTGAT	caGTTTC	cctgtagttgtgtatattca	gtgagcat
B. Tau	gtttcaaa	gtgcaagagaaa...236...agttccattttaaagtctcc	TTGGTGAT	caGTTTC	cctgtagttgtgtatattca	gtgagcat
E. Cab	gtttcaaa	gtgcaagagaaa...235...agttccattttaaagtctcc	TTGGTGAT	caGTTTC	cctgtagttgtgtatattca	gtgagcat
S. Sus	atttcaaa	gtgcaagagaaa...235...agttccattttaaagtctcc	TTGGTGAT	caGTTTC	cctgtagttgtgtatattca	gtgagcgt
O. Avi	gtttcaaa	gtgcaagagaaa...236...agttccattttaaagtctcc	TTGGTGAT	caGTTTC	cctgtagttgtgtatattca	gtgngcat
L. Afr	gtttcaaa	gtacaagagaaa...237...gttccattttaaagtctcc	TTGGTGAT	caGTTTC	cctgtagttgtgtattga	gtgagcat
	*****	** *****	* *****	*****	**** * ** * * *	*** ** *

id=460999 gene=ENSG00000125676 name=THOC2 segment=chrX.122754226_122754521_-1 type=AN VIEW

Figure 805:



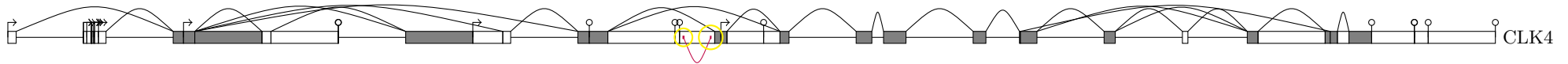
H.Sap	aatttcag	gccttttctaacaag	AAGCTGCATTAA	---gagccttagggatgaagtgc...	192...	tattcctttgag	gtagataa
R.Mac	aatttcag	gccttttctaacacag	AAGCTGCATTAA	---gagccttagggatgaagtgc...	190...	tattcctttgag	gtagataa
P.Tro	aatttcag	gccttttctaacaag	AAGCTGCATTAA	---gagccttagggatgaagtgc...	192...	tattcctttgag	gtagataa
P.Abe	aatttcag	gccttttctaacacag	AAGCTGCATTAA	---gagccttagggatgaagtgc...	192...	tattcctttgag	gtagataa
C.Jac	aatttcag	gccttttctaacacag	AAGCTGCATTAA	---gagccttagggatgaagtgc...	192...	tattcctttgag	gtagataa
M.Mus	aatttcag	gccttttctaacaca	GAAGCTGCATTAA	---gagccttagggatgaagtgc...	183...	tattcctttgag	gtagataa
R.Nor	aatttcag	gccttttctaacaca	GAAGCTGCATTAA	gaaagagccttagggatgaa---	189...	tgctcctttgag	gtagataa
C.Por	aatttcag	gccttttctaacacag	AAGCTGCATTAA	---gagccttagggatgaagtgc...	192...	tattcctttgag	gtagataa
O.Cun	aatttcag	gccttttctaacacag	AAGCTGCATTAA	---gagccttagggatggagtgc...	192...	tattccttgag	gtagataa
C.Fam	aatttcag	gccttttctaacacag	AAGCTGCATTAA	---gagccttagggatgaagtgc...	192...	tattcctttgag	gtagataa
B.Tau	aatttcag	gccttttctaacacag	AAGCTGCATTAA	---gagccttagggatgaagtgc...	192...	tattcctttgag	gtagataa
S.Sus	aatttcag	gccttttctaacacag	AAGCTGCATTAA	---gagccttagggatgaagtgc...	192...	tattcctttgag	gtagataa
O.Avi	aatttcag	gccttttctaacacag	AAGCTGCATTAA	---gagccttagggatgaagtgc...	192...	aattcctttgag	gtagataa
L.Afr	aatttcag	gccttttctaacacag	AAGCTGCATTAA	---gagccttagggatgaagtgc...	183...	tattcctttgag	gtagataa
*****	*****	*****	*****	*****	*****	*****	*****

id=788969 gene=ENSG00000108443 name=RPS6KB1 segment=chr17.58008161.58008413.1 type=AN

H.Sap	ctataata	cttgcaactaaggacaaa	TTAGcATGCAaGCTT	ggtcaactttttccagcaa--...	215...	aatcattgttaa	ccacagct
R.Mac	ctataata	cttgcaactaaggacaaa	TTAGcATGCAaGCTT	ggtcaactttttccagcaa--...	215...	aatcattgttaa	ccacagct
P.Tro	ctataata	cttgcaactaaggacaaa	TTAGcATGCAaGCTT	ggtcaactttttccagcaa--...	215...	aatcattgttaa	ccacagct
P.Abe	ctataata	cttgcaactaaggacaaa	TTAGcATGCAaGCTT	ggtcaactttttccagcaa--...	210...	aatcattgttaa	ccacagct
C.Jac	ctataata	cttgcaactaaggacaaa	TTAGcATGCAaGCTT	ggtcaactttttccagcaa--...	213...	aatcattgttaa	ccacagct
M.Mus	ctgtaata	cttgcaactaaggacaaa	TTAGcATGCAaGCTT	gtcaactttttccagcaac--...	205...	gatcattgttaa	ccacagct
R.Nor	ctgtaata	cttgcaactaaggacaaa	TTAGcATGCAaGCTT	gtcaactttttccagcaac--...	206...	aatcattgttaa	ccacagct
C.Por	ctataata	cttgcaactaaggacaaa	TTAGcATGCAaGCTT	ggtcaactttttccagcaa--...	213...	aatcattgttaa	ccacagct
O.Cun	ctataata	cttgcaactaaggacaaa	TTAGcATGCAaGCTT	ggtcaactttttccagcaa--...	215...	aatcattgttaa	ccacagct
C.Fam	ctgtaata	cttgcaactaaggacaaa	TTAGcATGCAaGCTT	gttcaactttttccagcaa--...	215...	aatcattgttaa	ccacagct
B.Tau	ctataata	cttgcaactaaggacaaa	TTAGcATGCAaGCTT	ggttaaac--tttccagcaaca...	213...	aatcattgttaa	ccacagct
S.Sus	ctgtaata	cttgcaactaaggacaaa	TTAGcATGCAaGCTT	ggtcaacctttttccagcaa--...	216...	aatcattgttaa	ccacagct
O.Avi	ctataata	cttgcaactaaggacaaa	TTAGcATGCAaGCTT	ggttaaac--tttccagcaaca...	212...	aatcattgttaa	ccacagct
L.Afr	tgccata	cttgcaactaaggacaaa	TTAGcATGCAaGCTT	ggttaaacctttttccagcaa--...	216...	aatcattgttaa	ccacagct
***	*****	*****	*****	*****	*****	*****	*****

id=788992 gene=ENSG00000108443 name=RPS6KB1 segment=chr17.58024543.58024822.1 type=AN VIEW

Figure 806:



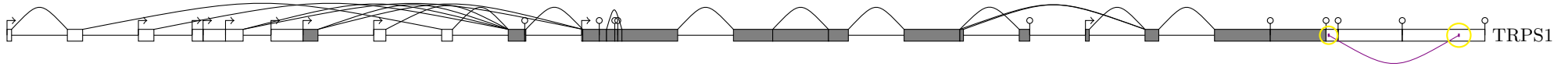
H. Sap	agagacaa	ttgtgtgtgttttt-----:~::~-----	TCTA	attGCCA	ctTTAAGTATC	ttatctgaaaatctgttcct---...195...ttgccgttccag	aagagcca				
R. Mac	agagacaa	ttgtgtgtgttttt-----:~::~-----	TCTA	attGCCA	ctTTAAGTATC	ttatctgaaaatctgttcct---...195...ttgccgttccag	aagagcca				
P. Tro	agagacaa	ttgtgtgtgttttt-----:~::~-----	TCTA	attGCCA	ctTTAAGTATC	ttatctgaaaatctgttcct---...195...ttgccgttccag	aagagcca				
P. Abe	agagacaa	ttgtgtgtgttttttctattgcaactttaagt::~::~:tgaattgaaattgctcctgccactgttcgtggcctggt	GCTT	aTCTGAATG	-----cctgaatatctccccctga...70...ttgccgttccag	aagagcca					
C. Jac	agagacaa	ttgtgtgtgtttttt-----:~::~-----	TCTA	attGCCA	ctTTAAGTATC	ttatctgaaaatctgttcct---...195...ttgccgttccag	aagagcca				
M. Mus	agagacaa	ttgtgtgtgtttttt-----:~::~-----	TCTA	attGCCA	ctTTAAGTATC	ttatctgaaaatctgttcct---...195...ttgccgttccag	aagagcca				
R. Nor	agagacaa	ttgtgtgtgtttttt-----:~::~-----	TCTA	attGCCA	ctTTAAGTATC	ttatctgaaaatctgttcct---...195...ttgccgttccag	aagagcca				
C. Por	agagacaa	ttgtgtgtgtttttt-----:~::~-----	TCTA	attGCCA	ctTTAAGTATC	ttatctgaaaatctgttcct---...195...ttgccgttccag	aagagcca				
O. Cun	agagacaa	ttgtgtgtgtttttt-----:~::~-----	TCTA	attGCCA	ctTTAAGTATC	ttatctgaaaatctgttcct---...195...ttgccgttccag	aagagcca				
C. Fam	agagacaa	ttgtgtgtgtttttt-----:~::~-----	TCTA	attGCCA	ctTTAAGTATC	ttatctgaaaatctgttcct---...195...ttgccgttccag	aagagcca				
F. Cat	agagacaa	ttgtgtgtgtttttt-----:~::~-----	TCTA	attGCCA	ctTTAAGTATC	ttatctgaaaatctgttcct---...195...ttgccgttccag	aagagcca				
B. Tau	agagacaa	ttgtgtgtgtttttt-----:~::~-----	TCTA	attGCCA	ctTTAAGTATC	ttatctgaaaatctgttcct---...195...ttgccgttccag	aagagcca				
E. Cab	agagacaa	ttgtgtgtgttttttctattgccacttgaagt::~::~:tgaattgaaattgctcctgccactgttcgtggcctggt	GCTT	aTCTGAATG	-----cctgaatatctccccctga...70...ttgccgttccag	aagagcca					
S. Sus	agagacaa	ttgtgtgtgtttttt-----:~::~-----	TCTA	attGCCA	ctTTAAGTATC	ttatctgaaaatctgttcct---...195...ttgccgttccag	aagagcca				
L. Afr	agagacaa	ttgtgtgtgtttttttt-----:~::~-----	TCTA	attGCCA	ctTTAAGTATC	ttatctgaaaatctgttcct---...195...ttgccgttccag	aagagcca				
	*****	*****		**	***	* * * *	*****	*****	*	*****	*****

id=746895 gene=ENSG00000113240 name=CLK4 segment=chr5_178044436_178044697_-1 type=AN

H. Sap	agagacaa	ttgtgtgtgtttt...180...-----ttctgccctgaattcactct	GATAT	aTTGAT	TGGCTGGA	cgatcttggtgctgccacttgccgttccag	aagagcca			
R. Mac	agagacaa	ttgtgtgtgtttt...180...-----ttctgccctgaattcactct	GATAT	aTTGAT	TGGCTGGA	cgatcttggtgctgccacttgccgttccag	aagagcca			
P. Tro	agagacaa	ttgtgtgtgtttt...180...-----ttctgccctgaattcactct	GATAT	aTTGAT	TGGCTGGA	cgatcttggtgctgccacttgccgttccag	aagagcca			
P. Abe	agagacaa	ttgtgtgtgtttt...222...tcttggtgctgccc---acttgc---	CGT-T	cCAGAA	GAGC	-----ca				
C. Jac	agagacaa	ttgtgtgtgtttt...181...-----ttctgccctgaattcactct	GATAT	aTTGAT	TGGCTGGA	cgatcttggtgctgccacttgccgttccag	aagagcca			
M. Mus	agagacaa	ttgtgtgtgtttt...180...-----ttctgccctgaattcactct	GATAT	aTTGAT	TGGCTGGA	cgatcttggtgctgccacttgccgttccag	aagagcca			
R. Nor	agagacaa	ttgtgtgtgtttt...180...-----ttctgccctgaattcactct	GATAT	aTTGAT	TGGCTGGA	cgatcttggtgctgccacttgccgttccag	aagagcca			
C. Por	agagacaa	ttgtgtgtgtttt...180...-----ttctgccctgaattcactct	GATAT	aTTGAT	TGGCTGGA	cgatcttggtgctgccacttgccgttccag	aagagcca			
O. Cun	agagacaa	ttgtgtgtgtttt...180...-----ttctgccctgaattcactct	GATAT	aTTGAT	TGGCTGGA	cgatcttggtgctgccacttgccgttccag	aagagcca			
C. Fam	agagacaa	ttgtgtgtgtttt...181...-----ttctgccctgaattcactct	GATAT	aTTGAT	TGGCTGGA	cgatcttggtgctgccacttgccgttccag	aagagcca			
F. Cat	agagacaa	ttgtgtgtgtttt...181...-----ttctgccctgaattcactct	GATAT	aTTGAT	TGGCTGGA	cgatcttggtgctgccacttgccgttccag	aagagcca			
B. Tau	agagacaa	ttgtgtgtgtttt...181...-----ttctgccctgaattcactct	GATAT	aTTGAT	TGGCTGGA	cgatcttggtgctgccacttgccgttccag	aagagcca			
E. Cab	agagacaa	ttgtgtgtgtttt...222...tcttggtgctgccc---acttgc---	CGT-T	cCAGAA	GAGC	-----ca				
S. Sus	agagacaa	ttgtgtgtgtttt...180...-----ttctgccctgaattcactct	GATAT	aTTGAT	TGGCTGGA	cgatcttggtgctgccacttgccgttccag	aagagcca			
L. Afr	agagacaa	ttgtgtgtgtttt...184...-----ttctgccctgaattcactct	GATAT	aTTGAT	TGGCTGGA	cgatcttggtgctgccacttgccgttccag	aagagcca			
	*****	*****		*	*****	* * *	**	**	**	**

id=746895 gene=ENSG00000113240 name=CLK4 segment=chr5_178044436_178044697_-1 type=AN VIEW

Figure 807:



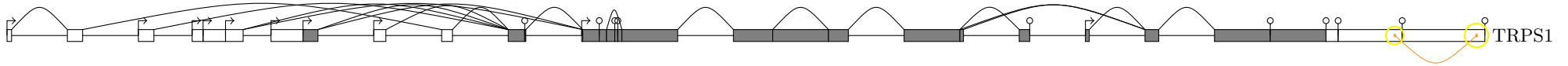
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R. Mac	cttcatag	agcctgc	CTTA	tcCAACATGAAATT	cccttc-ttttattattcttt-----	...51...	gaaagaatggaa--	gatggtaa
P. Tro	cttcatag	agcctgc	CTTA	tcCAACATGAAATT	cccttc-ttttattattcttt-----	...51...	gaaagaatggaa--	gatggtaa
P. Abe	cttcatag	agcctgc	CTTA	tcCAACATGAAATT	cccttc-ttttattattcttt-----	...51...	gaaagaatggaa--	gatggtaa
C. Jac	cttcatag	agcctgc	CTTA	tcCAACATGAAATT	cccttc-tttgattattcttt-----	...51...	gaaagaatggaa--	gatggtaa
R. Nor	attcatag	agcctgc	CTTA	ccCAACATGAAATT	cccttt-ttcttaatttcttt-----	...51...	gaaagaatggaatt	gatag--a
C. Por	cttcctag	agcctgc	CTTA	tcCAACATGAAATT	cccttt-ttttttttttttgt-----	...74...	gaaagaatgtaa--	ggtggtaa
O. Cun	cttcatag	agcctgc	CTTA	tcCAACATGAAATT	cccttc-tttttattattctt-----	...52...	gaaagaatggaa--	gatggcaa
C. Fam	cttcatag	agcctgc	CTTA	tcCAACATGAAATT	cccttc-ttttattctttctt-----	...56...	ataaaaatggaa--	gatggtaa
F. Cat	cttcatag	agcctgc	CTTA	tcCAACATGAAATT	cccttc-ttttattctttctt-----	...60...	aataaaatggaa--	gatggtaa
B. Tau	cttcatag	agcctgc	CTTA	tcCAACATGAAATTCC	cttc-ttttattattctttct----	...53...	aaaaaaaggaa--	gatggtaa
E. Cab	cttcatag	agcctgc	CTTA	tcCAACATGAAATT	cccttc-ttttattattcttt-----	...52...	gaaaaaatggaa--	gatggtaa
O. Avi	cttcatag	agcctgc	CTTA	tcCAACATGAAATT	cccttc-ttttattattcttt-----	...58...	aaaaataagaa--	gatggtaa
L. Afr	cttcatag	agcctgc	CTTA	tcCAACATGAAATTcCTTC	-tttattattctttattttg...	...47...	gaaagaatgaga--	gatggtaa
	*** **	*****	*****	*****	** **		* * *	* * *

id=398230 gene=ENSG00000104447 name=TRPS1 segment=chr8.116426042.116426149.-1 type=E3

H. Sap	ggaaaaaa	aaaacttatttt--...	3772...	-----	aaatgcttttcatatggaat	GATTCATGTTG	TAAG	aaaaagaattcaattttagt	----	...200...	accagttacaca	taacggcg
R. Mac	ggaaaaaa	aaaacttatttt--...	3743...	-----	aaatgcttttcatatgaaat	GATTCATGTTG	TAAg	aaaaagaattcaattttagt	----	...200...	accagttacaca	taacggcg
P. Tro	ggaaaaaa	aaaacttatttt--...	3772...	-----	aaatgcttttcatatggaat	GATTCATGTTG	TAAg	aaaaagaattcaattttagt	----	...200...	accagttacaca	taacggcg
P. Abe	ggaaaaaa	aaaacttatttt--...	3777...	-----	aaatgcttttcatatggaat	GATTCATGTTG	TAAg	aaaaagaattcaattttagt	----	...200...	accagttacaca	taacggcg
C. Jac	ggaaaaaa	aaaacttatttt--...	3754...	-----	aaatgcttttcatatggaat	GATTCATGTTG	TAAg	aaaaagaattcaattttagt	----	...200...	accagttacaca	taacggcg
R. Nor	aaaggaaa	aaaacttatttt--...	3728...	-----	aaatgcttttcatatggaat	GATTCATGTTG	TAAg	aaaaagcattcaattttagt	----	...200...	accagttatcca	tgacggct
C. Por	ggaaaaaa	aaaacttatttt--...	3773...	-----	aaacgtctttcatatggaat	GATTCATGTTG	TAAg	aaaaagaattcaattttagt	----	...194...	accagttacaca	caatggcg
O. Cun	aggaaaaa	aaaacttatttt--...	3729...	-----	aaatgcttttcatatggaat	GATTCATGTTG	TAAg	aagaagaattcaattttagt	----	...200...	accagttataca	taatggcg
C. Fam	aggagaaa	aaaacttatttt--...	3840...	-----	aaatgcttttcatatggaat	GATTCATGTTG	TAAg	aaaaaattcaattttagtgc	---	...199...	accagttataca	taatggcg
F. Cat	ggaaaaaa	aaaacttatttt--...	4710...	-----	aaatgcttttcatatggaat	GATTCATGTTG	TAAg	aaaaaattcaattttagtgc	---	...198...	accagttatata	taatggcg
B. Tau	ggaaaaaa	aaaaaaaaacct--...	3776...	..gcagaaaatgcttttcatac	GGAATGA-TTCATGTTG	TAAg	aaaaaattcaattttagtgc	---	...199...	accagttataca	tgatggcg	
E. Cab	ggaaaaaa	aaaacttatttt--...	3772...	-----	aaatgcttttcatatggaat	GATTCATGTTG	TAAg	aaaaaattcaattttagtgc	---	...201...	accagttataca	taatggcg
O. Avi	--aggaaa	aaaaaaaaacctta...	3751...	-----	aaacgtctttcatacggaaat	GATTCATGTTG	TAAg	aaaaaattcaattttagtgc	---	...200...	accagttataca	tgatggcg
L. Afr	ggaaaaaa	aaaacttatttt--...	3736...	..gcagaaaatgcttttcatac	GGAGtGATTCATGTTG	TAAg	aaaaaattcaattttagtgc	---	...194...	accagttacaca	taatggcg	
	***	***	*	*	***	*****	* * *	*****	*	*	*	**

id=398232 gene=ENSG00000104447 name=TRPS1 segment=chr8.116420724.116424776.-1 type=E3 VIEW

Figure 808:



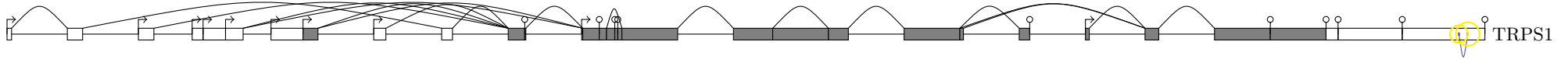
H. Sap	gaatggaa	gatggtaacaa-...1150...tttattttttgccacggaga	TGTAGAAGATAT	taCAAG	ctactggatgcaactgtcaga...33...aataggaaaaa	aaaactta
R. Mac	gaatggaa	gatggtaacaa-...1151...tttattttttgccacggaga	TGTAGAAGATAT	taCAAG	ctactggatgcaactgtcaga...33...aataggaaaaa	aaaactta
P. Tro	gaatggaa	gatggtaacaa-...1149...tttattttttgccacggaga	TGTAGAAGATAT	taCAAG	ctactggatgcaactgtcaga...33...aataggaaaaa	aaaactta
P. Abe	gaatggaa	gatggtaacaa-...1150...tttattttttgccacggaga	TGTAGAAGATAT	taCAAG	ctactggatgcaactgtcaga...32...aataggaaaaa	aaaactta
C. Jac	gaatggaa	gatggtaacaa-...1154...tttattttttgccacggaga	TGTAGAAGATAT	taCAAG	ctactggatgcaactgtcaga...33...aataggaaaaa	aaaactta
M. Mus	gaatgaaa	t-taatagataat...1145...tttattttttgccacggaga	TGTAGAAGATAT	taCAAG	ctactggatgcaactgtcaga...32...aataggaaaaa	aaaactta
R. Nor	gaatggaa	t-tgatagataat...1146...tttattttttgccacggaga	TGTAGAAGATAT	taCAAG	ctactggatgcaactgtcaga...30...acaaaaggaaa	aaaactta
C. Por	gaatgtaa	ggtggtaaacag-...1157...tttattttttgccacggaga	TGTAGAAGATAT	taCAAG	ctactggatgcaactgtcaga...33...aataggaaaaa	aaaactta
O. Cun	gaatggaa	gatggcaaacaa-...1151...tttattttttgccacggaga	TGTAGAAGATAT	taCAAG	ctactggatgcaactgtcaga...32...aataggaaaaa	aaaactta
C. Fam	aaatggaa	gatggtaaatag-...1167...tttattttttgccacggaga	TGTAGAAGATAT	taCAAG	ctactggatgcaactgtcaga...32...aataggagaaa	aaaactta
F. Cat	aaatggaa	gatggtaaatag-...1354...tttattttttgccacggaga	TGTAGAAGATAT	taCAAG	ctactggatgcaactgtcaga...33...aataggaaaaa	aaaactta
B. Tau	aaaaggaa	gatggtaaatag-...1157...tttattttttgccacggaga	TGTAGAAGATAT	taCAAG	ctactggatgcaactgtcaga...33...aataggaaaaa	aaaaaaa
E. Cab	aaatggaa	gatggtaaatag-...1154...tttattttttgccacggaga	TGTAGAAGATAT	taCAAG	ctactggatgcaactgtcaga...33...aataggaaaaa	aaaactta
O. Avi	aataagaa	gatggtaaatag-...1158...tttattttttgccacggaga	TGTAGAAGATAT	taCAAG	ctactggatgcaactgtcaga...33...aataaggaaaaa	aaaaaac
L. Afr	gaatgaga	gatggtaaacag-...1236...tttattttttgccacggaga	TGTAGAAGATAT	taCAAG	ctactggatgcaactgtcaga...33...aataggaaaaa	aaaactta
		*	*	*	*	*

id=398231 gene=ENSG0000104447 name=TRPS1 segment=chr8_116424777_116426041_-1 type=E3

H. Sap	--gaaaaaa	aaaacttatttt...3929...-tttctactcacaacatggt	CTTGGTGT	ATTTCCTATGCA	aacaatcttcaggcagcaaa...40...accagttacaca	taacggcg
R. Mac	--gaaaaaa	aaaacttatttt...3900...-tttctactcacaacatggt	CTTGGTGT	ATTTCCTATGCA	aacaatcttcaggcagcaaa...40...accagttacaca	taacggcg
P. Tro	--gaaaaaa	aaaacttatttt...3929...-tttctactcacaacatggt	CTTGGTGT	ATTTCCTATGCA	aacaatcttcaggcagcaaa...40...accagttacaca	taacggcg
P. Abe	--aggaaaa	aaaacttatttt...3934...-tttctactcacaacatggt	CTTGGTGT	ATTTCCTATGCA	aacaatcttcaggcagcaaa...40...accagttacaca	taacggcg
C. Jac	--gaaaaaa	aaaacttatttt...3911...-tttctactcacaacatggt	CTTGGTGT	ATTTCCTATGCA	aacaatcttcaggcagcaaa...40...accagttacaca	taacggcg
M. Mus	--aggaaaa	aaaacttatttt...3887...atctcgactcac-aacatggt	CTTGGTGT	ATTTCCTATGCA	aacaatcttcaggcagcaaa...40...accagttatcca	tgacggct
R. Nor	--aaaggaaa	aaaacttatttt...3885...atctctactcac-aacatggt	CTTGGTGT	ATTTCCTATGCA	aacaatcttcaggcagcaaa...40...accagttatcca	tgacggct
C. Por	--gaaaaaa	aaaacttatttt...3924...-tttctactcacaacatggt	CTTGGTGT	ATTTCCTATGCA	aacaatcttcaggcagcaaa...40...accagttacaca	caatggcg
O. Cun	--aggaaaa	aaaacttatttt...3886...-tttctactcacaacatggt	CTTGGTGT	ATTTCCTATGCA	aacaatcttcaggcagcaaa...40...accagttatata	taatggcg
C. Fam	--aggagaaa	aaaacttatttt...3996...-tttctactcacaacatggt	CTTGGTGT	ATTTCCTATGCA	aacaatcttcaggcagcaaa...40...accagttatata	taatggcg
F. Cat	--gaaaaaa	aaaacttatttt...4865...-tttctactcacaacatggt	CTTGGTGT	ATTTCCTATGCA	aacaatcttcaggcagcaaa...40...accagttatata	tgatggcg
B. Tau	ggaaaaaaa	aaaaaacct-...3936...-tttctactcacaacatggt	CTTGGTGT	ATTTCCTATGCA	aacaatcttcaggcagcaaa...40...accagttatata	tgatggcg
E. Cab	--gaaaaaa	aaaacttatttt...3930...-tttctactcacaacatggt	CTTGGTGT	ATTTCCTATGCA	aacaatcttcaggcagcaaa...40...accagttatata	taatggcg
O. Avi	--aggaaaa	aaaaaacctta...3908...-tttctactcacaacatggt	CTTGGTGT	ATTTCCTATGCA	aacaatcttcaggcagcaaa...40...accagttatata	tgatggcg
L. Afr	--gaaaaaa	aaaacttatttt...3892...-tttctactcacaacatggt	CTTGGTGT	ATTTCCTATGCA	aacaatcttcaggcagcaaa...40...accagttacaca	taatggcg
	***	****	*	***	*****	*****

id=398232 gene=ENSG0000104447 name=TRPS1 segment=chr8_116420724_116424776_-1 type=E3 VIEW

Figure 809:



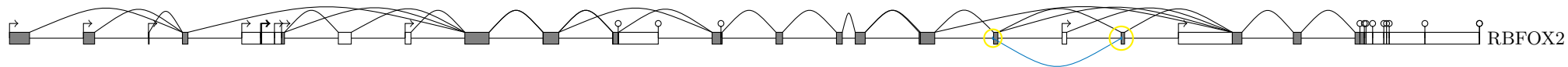
H. Sap	--ggaaaaaa	aaaacttatttt...3765...----	cagcag-aaaatgtctttcat	ATGGAAtGATTTCATGTTGc	TAAGAAaaAGAATT	---caattttagtcctgatttg...190...accagttacaca	taacggcg								
R. Mac	--ggaaaaaa	aaaacttatttt...3736...----	cagcag-aaaatgtctttcat	ATGGAAtGATTTCATGTTGc	TAAGAAaaAGAATT	---caattttagtcctgatttg...190...accagttacaca	taacggcg								
P. Tro	--ggaaaaaa	aaaacttatttt...3765...----	cagcag-aaaatgtctttcat	ATGGAAtGATTTCATGTTGc	TAAGAAaaAGAATT	---caattttagtcctgatttg...190...accagttacaca	taacggcg								
P. Abe	--aggaaaaa	aaaacttatttt...3770...----	cagcag-aaaatgtctttcat	ATGGAAtGATTTCATGTTGc	TAAGAAaaAGAATT	---caattttagtcctgatttg...190...accagttacaca	taacggcg								
C. Jac	--ggaaaaaa	aaaacttatttt...3718...----	atgta--aaattaacttagagc-----	AATAttCACCAGcAGAAaATGT	ctttcatgtggaat--gatttc...231...accagttacaca	taacggcg									
M. Mus	--aggaaaaa	aaaacttatttt...3692...gccaatgta--aaactaac----	agc-----	AATAttCACCAGcAGAAaATGT	ctttcatatggaat--gatttc...233...accagttatcca	tgacggct									
R. Nor	--aaaggaaa	aaaacttatttt...3721...----	cagcag-aaaatgtctttcat	ATGGAAtGATTTCATGTTGc	TAAGAA--aaagcattcaattttagtc-----	...198...accagttatcca	tgacggct								
C. Por	--ggaaaaaa	aaaacttatttt...3766...----	agcagaaaaacgtctttcat	ATGGAAtGATTTCATGTTGc	TAAGAAaaAGAATT	---caattttagtcctgatttg...184...accagttacaca	caatggcg								
O. Cun	--aggaaaaa	aaaacttatttt...3722...----	cagcag-aaaatgtctttcat	ATGGAAtGATTTCATGTTGc	TAAGAAgaAGAATT	---caattttagtcctgatttg...190...accagttacaca	taatggcg								
C. Fam	--aggagaaa	aaaacttatttt...3833...----	cagcag-aaaatgtctttcat	ATGGAAtGATTTCATGTTGc	TAAGAA--aaa-attcaattttagtcct-----	...197...accagttatata	taatggcg								
F. Cat	--ggaaaaaa	aaaacttatttt...4674...----	atgta--aaattaacttacagc-----	AATAttCACCAGcAGAAaATGT	ctttcatatggaat--gatttc...229...accagttatata	taatggcg									
B. Tau	ggaaaaaaa	aaaaaacct--...3776...----	gcag-aaaatgtctttcatac	GGAATGA-TTCATGTTGc	TAAGA--aaa-attcaattttagtcct-----	...198...accagttacaca	tgatggcg								
E. Cab	--ggaaaaaa	aaaacttatttt...3767...----	gcag-aaaatgtctttcat	GGAAtGATTTCATGTTGc	TAAGAA--aaaatcaattttagtcct-----	...199...accagttatata	taatggcg								
O. Avi	--aggaaaaa	aaaaaacctta...3746...----	gcag-aaaacgtctttcatac	GGAAtGATTTCATGTTGc	TAAGAA--aaa-attcaattttagtcct-----	...198...accagttatata	tgatggcg								
L. Afr	--ggaaaaaa	aaaacttatttt...3734...----	cagcag-aaaatgtctttcat	ATGGAgtGATTTCATGTTGc	TAAGAA-----aattcattttagtcctga----	...192...accagttacaca	taatggcg								
	***	***	*		* * **	*		** **	**				*****	*	**

id=398232 gene=ENSG00000104447 name=TRPS1 segment=chr8.116420724.116424776_-1 type=E3

H. Sap	--ggaaaaaa	aaaacttatttt...3842...actagaatgttggctataat	AGTTCgTTCTTACAACac	ATGAAATTTTTCGT	---tttattttattttgttttca-----	...113...accagttacaca	taacggcg								
R. Mac	--ggaaaaaa	aaaacttatttt...3813...attagaatgttggctataat	AGTTCgTTCTTACAACac	ATGAAATTTTTCGT	---tttattttattttgttttca-----	...113...accagttacaca	taacggcg								
P. Tro	--ggaaaaaa	aaaacttatttt...3842...actagaatgttggctataat	AGTTCgTTCTTACAACac	ATGAAATTTTTCGT	---tttattttattttgttttca-----	...113...accagttacaca	taacggcg								
P. Abe	--aggaaaaa	aaaacttatttt...3847...actagaatgttggctataat	AGTTCgTTCTTACAACac	ATGAAATTTTTCGT	---tttattttattttgttttca-----	...113...accagttacaca	taacggcg								
C. Jac	--ggaaaaaa	aaaacttatttt...3904...-----	atggttcatttctac--tcacaa-----	ACATgTTCTTGGTGTATT	tcttatgcaacaatcttca-----	...49...accagttacaca	taacggcg								
M. Mus	--aggaaaaa	aaaacttatttt...3880...-----	catgttcatttgcac--tcaca-----	ACATgTTCTTGGTGTATT	tcttatgcaacaatcttca-----	...49...accagttatcca	tgacggct								
R. Nor	--aaaggaaa	aaaacttatttt...3805...-----	tgtgggtataatagttctg	TTCTTACAACac	ATGGAATTTTTCAT	tttattttattttgttttca-----	...112...accagttatcca	tgacggct							
C. Por	--ggaaaaaa	aaaacttatttt...3843...attagaatgttggctataat	AGTTCgTTCTTACAACac	ATGGAATTTTTCGT	---tttattttattttgttttca-----	...108...accagttacaca	caatggcg								
O. Cun	--aggaaaaa	aaaacttatttt...3799...attagaatgttggctataat	AGTTCgTTCTTACAACac	ATGGAATTTTTCGT	---tttattttattttgttttca-----	...113...accagttatata	taatggcg								
C. Fam	--aggagaaa	aaaacttatttt...3915...-----	tgtggctataatagttctg	TTCTTACAACac	ATGGAATTTTTCGT	tttattttattttgttttca-----	...113...accagttatata	taatggcg							
F. Cat	--ggaaaaaa	aaaacttatttt...4858...-----	atggttcatttctac--tcacaa-----	ACATgTTCTTGGTGTATT	tcttatgcaacaatcttca-----	...49...accagttatata	taatggcg								
B. Tau	ggaaaaaaa	aaaaaacct--...3856...-----	gttggctataatagttctg	TCTTACAACACATGGAATTTT	---tttattttattttgttttca-----	...119...accagttatata	tgatggcg								
E. Cab	--ggaaaaaa	aaaacttatttt...3847...-----	tgttggctataatagttctg	TTCTTACAACac	ATGGAATTTTTCGT	---tttattttattttgttttca-----	...118...accagttatata	taatggcg							
O. Avi	--aggaaaaa	aaaaaacctta...3826...-----	tgttggctataatagttctg	TTCTTACAACac	ATGGAATTTTTCGT	---tttattttattttgttttca-----	...118...accagttatata	tgatggcg							
L. Afr	--ggaaaaaa	aaaacttatttt...3814...-----	tgttggctataatagttctg	TTCTTACAACac	ATGGAATTTTTCGT	---tttattttattttgttttca-----	...113...accagttacaca	taatggcg							
	***	***	*		**	*		**	**				*****	*	**

id=398232 gene=ENSG00000104447 name=TRPS1 segment=chr8.116420724.116424776_-1 type=E3 VIEW

Figure 810:



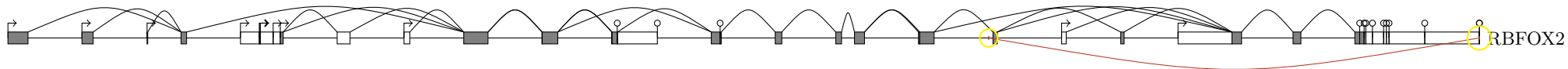
H. Sap	tatccagg	gtaagcgtaga...3684...---	tgttcttttgtttttttgt-	TTTTGtt	TTTGTGTGGATT	tctgcag	tgtggttt
R. Mac	tatccagg	gtaagcattaga...3663...---	tgttcttttgtttttttgt-	TTTTGtt	TTTGTGTGGATT	tctgcag	tgtggttt
P. Tro	tatccagg	gtaagcgtaga...3670...---	tgttcttttgtttttttgt-	TTTTGtt	TTTGTGTGGATT	tctgcag	tgtggttt
P. Abe	tatccagg	gtaagcgtaga...3679...---	tgttcttttgtttttttgt-	TTTTGtt	TTTGTGTGGATT	tctgcag	tgtggttt
C. Jac	tatccagg	gtaagcattaga...3706...---	tttgttttgttttgtgtg	GATTTCTG	caGTGTGG--TT	-----	-----t
M. Mus	tatccagg	gtaagcattaga...3391...-	tctgttctttg--tttttgt-	TTTTGtt	TTTGTGTGGATT	-ctgcag	tgtggttt
R. Nor	tatccagg	gtaagcattaga...3401...-	tctgttctttg--tttttgt-	TTTTGtt	TTTGTGTGGATT	-ctgcag	tgtggttt
C. Por	tatccagg	gtaagcattaca...3525...-	ctgttctttg-ttttttgt-	TTTTGtt	TTTGTGTGGATT	tctgcag	tgtggttt
O. Cun	taccagg	gtaagcgttga...3645...-	tttgttttgttttgtgtg	GATTTCTG	caGTGTGG--TT	-----	-----t
C. Fam	tatccagg	gtaagcattaga...3657...-	tttgttttgttttgtgtg	GATTTCTG	caGTGTGG--TT	-----	-----t
B. Tau	tatccagg	gtaagcattaga...3614...-	ctgttctttg-ttttttgt-	TTTTGtt	TTTGTGTGGATT	tctgcag	tgtggttt
E. Cab	taccagg	gtaagcattaga...3652...-	tctgttctttg--tttttgt-	TTTTGtt	TTTGTGTGGATT	tctgcag	tgtggttt
S. Sus	tatccagg	gtaagcattaga...3644...-	ttctgttcttttgtttttt	TTTTGtt	TTTGTGTGGATT	tctgcag	tgtggttt
O. Avi	tatccagg	gtaagcattaga...3641...-	tttgttttgttttgtgtg	GATTTCTG	caGTGTGG--TT	-----	-----t
L. Afr	tatccagg	gtaagcattaga...3689...-	tttgttttgttttgtgtg	GATTTCTG	caGTGTGG--TT	-----	-----t
	** *****	***** *	* * ***** ** *	*** *	***** **		*

id=369939 gene=ENSG00000100320 name=RBFOX2 segment=chr22.36152192.36155934_-1 type=IN

H. Sap	tacctcag	gtaggagtcca...2110...ccc	atttttgttttatttc	AAATCa	CACACAG	ATAGAA	tc
R. Mac	tacctcag	gtaggagtcca...2111...ccc	atttttgttttatttc	AAATCa	CACACAG	ATAGAA	tc
P. Tro	tacctcag	gtaggagtcca...2111...ccc	atttttgttttatttc	AAATCa	CACACAG	ATAGAA	tc
P. Abe	tacctcag	gtaggagtcca...2280...ccc	atttttgttttatttc	AAATCa	CACACAG	ATAGAA	tc
C. Jac	tacctcag	gtaggagtcca...2089...ccc	atttttgttttatttc	AAATCa	CACACaCAG	A	taGAATc
M. Mus	tacctcag	gtaggagtcca...1873...ccc	atttttgttttatttc	AAATCa	CACACAG	ATAGAA	tc
R. Nor	tacctcag	gtaggagtcca...1879...ccc	atttttgttttatttc	AAATCa	CACACAG	ATAGAA	tc
C. Por	tacctcag	gtaggagtcca...2128...ccc	atttttgttttatttc	AAATCa	CACACAG	ATAGAA	tc
O. Cun	tacctcag	gtaggagtcca...2320...ccc	atttttgttttatttc	AAATCa	CACACaCAG	A	taGAATc
C. Fam	tacctcag	gtaggagtcca...2086...ccc	atttttgttttatttc	AAATCa	CACACaCAG	A	taGAATc
B. Tau	tacctcag	gtaggagtcca...2102...ccc	atttttgttttatttc	AAATCa	CACACAG	ATAGAA	tc
E. Cab	tacctcag	gtaggagtcca...2124...ccc	atttttgttttatttc	AAATCa	CACACAG	ATAGAA	tc
S. Sus	tacctcag	gtaggagtcca...2110...ccc	atttttgttttatttc	AAATCa	CACACAG	ATAGAA	tc
O. Avi	tacctcag	gtaggagtcca...2075...ccc	atttttgttttatttc	AAATCa	CACACaCAG	A	taGAATc
L. Afr	tacctcag	gtaggagtcca...1914...ccc	atttttgttttatttc	AAATCa	CACACaCAG	A	taGAATc
	*****	*****	*** *****	*****	*****	*****	*

id=369943 gene=ENSG00000100320 name=RBFOX2 segment=chr22.36146505.36148659_-1 type=IN VIEW

Figure 811: CS=17.7



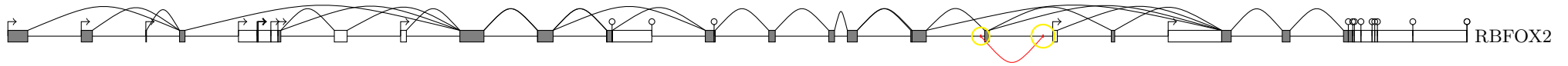
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R.Mac	tatccagg	gtaagc	attaga...	3631...	tgctgcc	gcctc	caataacc	GGAATGTGTTCT	gTTCTTTTGT	TTTTGTTT	gTTTTGTTT	gTGTGG	ATTTCTGC	gag	tgtgg	ttt
P.Tro	tatccagg	gtaagcg	gttaga...	3638...	tgctgcc	gcctc	caataacc	GGAATGTGTTCT	gTTCTTTTGT	TTTTGTTT	gTTTTGTTT	gTGTGG	ATTTCTGC	gag	tgtgg	ttt
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C.Jac	tatccagg	gtaagc	attaga...	3658...	tgctgcc	gcctc	caataacc	GGAATGTGTTCT	gTTCTTTTGT	TTTTGTTT	gTTTTGTTT	gTGTGG	ATTTCTGC	gag	tgtgg	ttt
M.Mus	tatccagg	gtaagc	attaga...	3366...	-----	ccgtc	ctcaataacc	ggaatGTGTTCT	gTTCTTTTGT	TTTTGTTT	gTTTTGTTT	gTGTGG	ATTTCTGC	gag	tgtgg	ttt
R.Nor	tatccagg	gtaagc	attaga...	3376...	-----	ccgtc	ctcaataacc	ggaatGTGTTCT	gTTCTTTTGT	TTTTGTTT	gTTTTGTTT	gTGTGG	ATTTCTGC	gag	tgtgg	ttt
C.Por	tatccagg	gtaagc	attaga...	3494...	tgctgcc	gcctc	caataacc	GGAATGTGTTCT	gTTCTTTTGT	TTTTGTTT	gTTTTGTTT	gTGTGG	ATTTCTGC	gag	tgtgg	ttt
O.Cun	taccagg	gtaagc	gtttga...	3604...	-----	ccgtc	ctcaataacc	ggaatGTGTTCT	gTTCTTTTGT	TTTTGTTT	gTTTTGTTT	gTGTGG	ATTTCTGC	gag	tgtgg	ttt
C.Fam	tatccagg	gtaagc	actaga...	3611...	tgctgcc	gcctc	caataacc	GGAATGTGTTCT	gTTCTTTTGT	TTTTGTTT	gTTTTGTTT	gTGTGG	ATTTCTGC	gag	tgtgg	ttt
B.Tau	tatccagg	gtaagc	agtaga...	3583...	tgctgcc	gcctc	caataacc	GGAATGTGTTCT	gTTCTTTTGT	TTTTGTTT	gTTTTGTTT	gTGTGG	ATTTCTGC	gag	tgtgg	ttt
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S.Sus	tatccagg	gtaagc	agtaga...	3615...	tgctgcc	gcctc	caataacc	GGAATGTGTTCT	gTTCTTTTGT	TTTTGTTT	gTTTTGTTT	gTGTGG	ATTTCTGC	gag	tgtgg	ttt
L.Afr	tatccagg	gtaagc	atcaga...	3643...	tgctgcc	gcctc	caataacc	GGAATGTGTTCT	gTTCTTTTGT	TTTTGTTT	gTTTTGTTT	gTGTGG	ATTTCTGC	gag	tgtgg	ttt
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P.Abe	ctctcctc	ttccctc	ctgtc...	4829...	ggtaat	gaagc	actgtttt	AAATAAAGAGAGAAACAC	cATTCT	----	ttg
C.Jac	ctctcctc	ttccctc	ctgtc...	4862...	ggtaat	gaagc	actgtttt	AAATAAAGAGAGAAACAC	cATTCT	----	ttg
M.Mus	ctctcctc	ttccctc	ctgcc...	4457...	ggtaat	gaagc	actgtttt	AAATAAAGAGAGAAACAC	c	----	caccctgg
R.Nor	ctctcctc	taacctc	ctgcc...	4450...	gtaac	gaagc	actgtttt	AAATAAAGAGAGAAACAC	c	----	cacctctgg
C.Por	ctctcctc	ttccttc	catatc...	4850...	gtaat	gaagc	actgtttt	AAATAAAGAGAGAAACAC	cATTCT	----	ttg
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B.Tau	ctctcctc	ttccctc	ctgtc...	4887...	ggtaat	gaagc	actgtttt	AAATAAAGAGAGAAACAC	cATTCT	cct---	
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Figure 812: CS=6.72



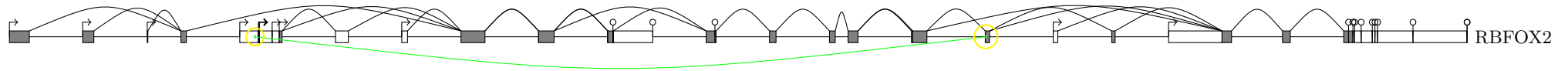
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C. Fam	tatccagg	gtaagcattaga...3619...tcctcaataaccggaatgtg	TTTCTgTTCTTTTG	-tttttttgttttgttttgtgtggattttctgcag	tgtggttt
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L. Afr	tatccagg	gtaagcattaga...3651...tcctcaataaccggaatgtg	TTTCTgTTCTTTTG	-tttttttgttttgttttgtgtggattttctgcag	tgtggttt
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C. Jac	acctctat	gtaagtacacac...2931...gtgaaaagcatgcttgcac	CAAAGGAAAGAAA	aggctggtgggcccccttagc...59...gttctgttatag	aatagtct
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C. Por	acctctat	gtaagtacacac...2517...gtgaaaagcatgcttgcac	CAAAGGAAAGAAA	aggctggtgtgggccctgt...61...gttctgttatag	aatagtct
O. Cun	acctctat	gtaagtacacac...2766...gtgaaaagcatgcttgcac	CAAAGGAAAGAAA	aggctggtgcgccctcagcg...57...gttctgttatag	aatagtct
C. Fam	acctctat	gtaagtacacac...2802...gtgaaaagcatgcttgcac	CAAAGGAAAGAAA	aggctggtgggcccccttagc...59...gttctgttatag	aatagtct
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Figure 813: CS=12.48



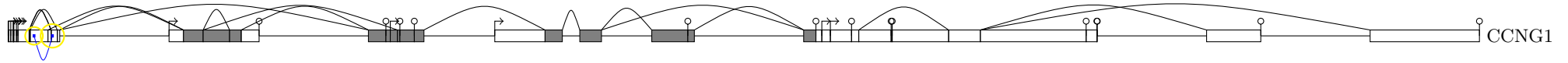
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R. Nor	aaactgcc	attctccagcag...95...tcaggggtggggcttccttc-	AGCCATCTGC	ctGAGATATggAGGGA	gcTGGAGAAAAGAAGGAGGGG	GAGAGAC	----t
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Figure 814: CS=6.72



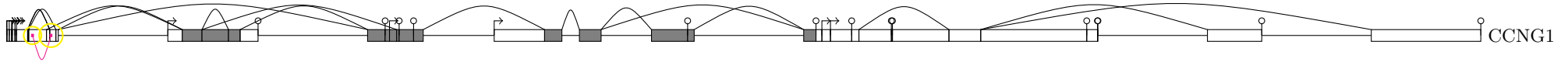
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 C.Fam aGGCCCGGGAGGGtag
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Figure 815: CS=6.24



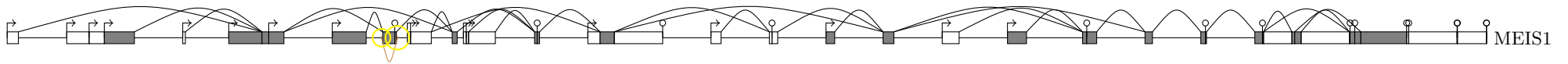
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P. Abe	ggggtgag	gtgagc--	AGGCCCGG	GGAGGGtg
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C. Fam	ggggtgag	gtgagagc	AGGCCCGG	GGAGGGta
F. Cat	ggggtgag	gtgagagca	GGCCCGG	GGAGGGag
B. Tau	ggggtgag	gtgagaGC	AGGCCCGG	GGAGGGtg
E. Cab	ggggtgag	gtgagagc	AGGCCCGG	GGAGGGtg
S. Sus	ggggtgag	gtgagagc	AGGCCCGG	GGAGGGtg
L. Afr	cgggtgag	gtgcGAGCa	AGGCCCGG	GGAGGGta
	* *	* *	*****	*****

id=23441 gene=ENSG00000113328 name=CCNG1 segment=chr5_162864757_162864770.1 type=AN VIEW

Figure 816: CS=6.24



```

H. Sap aaggggag gtgagcggtcac...113...-----ggggactaacattatgttgTTTGTGACTGTTgtattttctgcag acaccccc
R. Mac aaggggag gtgagcggtcac...118...-----ggggactaacattatgttgTTTGTGACTGTTgtattttctgcag acaccccc
P. Tro aaggggag gtgagcggtcac...113...-----ggggactaacattatgttgTTTGTGACTGTTgtattttctgcag acaccccc
P. Abe aaggggag gtgagcggtcac...114...-----ggggactaacattatgttgTTTGTGACTGTTgtattttctgcag acaccccc
C. Jac aaggggag gtgagcaggtcac...119...-----ggggactaacattatgttgTTTGTGACTGTTgtattttctgcag acaccccc
M. Mus agggggag gtgagccgtcac...108...-----ctggactaatcattgtgttgTTTGTGACTGTTgtattttctgcag acaccccc
R. Nor agggggag gtgagccgtcac...111...-----ctggactaatcattgtgttgTTTGTGACTGTTgtattttctgcag acaccccc
C. Por aaggggag gtgagcaggtcac...102...-----cgggactaacattgtgttgTTTGTGACTGTTgtattttcttacag acaccctc
O. Cun aaggggag gtgatccgccac...103...actgactcgggactaacattTGTGTgTTTGTGACTGTTgtattttcttacag acaccccc
F. Cat aaggggag gcgagcaggtcac...99...actgactcgggactaacattTGTGTgTTTGTGACTGTTgtattttctgcag acaccccc
B. Tau aaggggag gtgagcaggtcac...107...-ctgccgtgggactaacattGTGTGTTTGTGACTGTTgtattttctgcag acaccccc
E. Cab aaagggaa gtgagcaggtcac...103...-----cgggactaacattgtgttgTTTGTGACTGTTgtattttctgcag acaccccc
O. Avi aaagggag gtgagcaggtcac...107...-ctgccggtgggactaacattGTGTGTTTGTGACTGTTgtattttctgcag acaccccc
L. Afr aaggggag gtgagcaggtcac...298...-gtgt--gaggactaacattgtGTTGTTTGTGACTGTTgtattttctgcag acaccccc
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id=765037 gene=ENSG00000143995 name=MEIS1 segment=chr2.66666804.66666974.1 type=IN

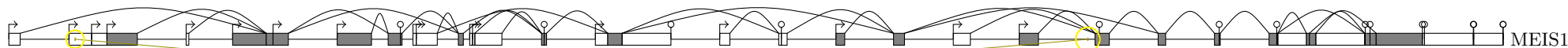
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H. Sap ccaAACAg GTCAGCAAA-----atagatgta-aaa-----agtaaagaaa:::::-----ggca--cactttca-----
R. Mac ccaAACAg GTCAGCAAA-----ataaatgta-aaa-----agtaaagaaa:::::-----ggca--cactttca-----
P. Tro ccaAACAg GTCAGCAAA-----atagatgta-aaa-----agtaaagaaa:::::-----ggca--cactttca-----
P. Abe ccaAACAg GTCAGCAAA-----atagatgta-aaa-----agtaaagaaa:::::-----ggta--cactttca-----
C. Jac ccaAACAg GTCAGCAAA-----ataaatgta-aaa-----agta-aaa:::::-----cgca--cgctttca-----
M. Mus ccaAACAg GTCAGCAAA-----acaaatatta-aaaaaaaaag---agtaaaaaagaa:::::agatagagaagta--gatgtttagagagcaatttctca
R. Nor ccaAACAg GTCAGCAAA-----acaaatattt-aaaaaaaa---agtaaaaaagaa:::::agatagagaagta--gatattta-----
C. Por ccaAACAg GTCAGCAAA-----ataaatgttattaaa-----gaaaaaaagaa:::::-----ggcaagcacatt-----
O. Cun ccaAACAg GTCAGCAAAATACATG--tttccaaaaaaa-aaaaaaaaaagtaaaaaaaagaaa:::::-----cgca--tattttca-----
F. Cat ccaAACAg GTCAGCAAA--ATATAgtttaaaaagta--aa-----gaaaaaaagaaa:::::-----agca--cattttca-----
B. Tau ccaAACAg GTCAGCAAAatCAATGT--ttcaaaagta-aaaaggaaa---aaaaaaagaaa:::::-----agca--catttgca-----
E. Cab ccaAACAg GTCAGCAAA-----ataaatgttt-aaa-----aagtaaaagaaa:::::-----aaca--cattttca-----
O. Avi ccaAACAg GTCAGCAAAatCAATGT--ttcaaaagta-aaaag-----aaaaaaagaaa:::::-----agca--catttgca-----
L. Afr ccaAACAg GTCAGCAAAaTAAC-----tgttt-aaa-----aag-----:::::-----aaca--cattttcc-----
***** ***** ** *

```

id=765040 gene=ENSG00000143995 name=MEIS1 segment=chr2.66667117.66667228.1 type=IN VIEW

Figure 817: CS=15.12



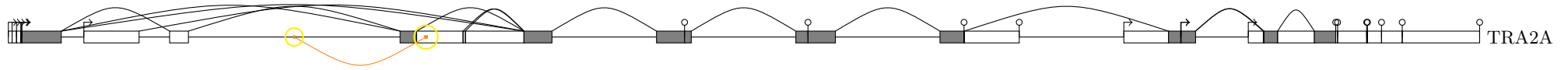
H. Sap	cacacttt	acacacgcacggggactgcaagcgggcagcatcgcgatcgtggctccttta	AGACAAACt	CAGAcagacatttttttaaccct---	137..	ttgaatattaac	atttgagg
R. Mac	cacacttt	acacacgcacggggactgcaagcgggcagcatcgcgatcgtggctccttta	AGACAAACt	CAGAcagacatttttttaaccct---	139..	ttgaatattaac	atttgagg
P. Tro	cacacttt	acacacgcacggggactgcaaacgggcagcatcgcgatcgtggctccttta	AGACAAACt	CAGAcagacatttttttaaccct---	139..	ttgaatattaac	atttgagg
P. Abe	cacacttt	acacacgcacggggactgcaagcgggcagcatcgcgatcgtggctccttta	AGACAAACt	CAGAcagacatttttttaaccct---	137..	ttgaatattaac	atttgagg
C. Jac	cacacttt	acacacgcacggggactgcaagcgggcagcatcgcgatcgtggctccttta	AGACAAACt	CAGAcagacatttttttaaccct---	145..	ttgaatattaac	atttgagg
M. Mus	cacacttt	acacacgcacggcgactgcaagcgggcagcatcgcgatcgtggctccttta	AGACAAACt	CAGAcagacatttttttaaccctc---	129..	ttgaatattaac	atttgagg
R. Nor	cacacttt	acacacgcacggcgactgcaagcgggcagcatcgcgatcgtggctccttta	AGACAAACt	CAGAcagacatttttttaaccctc---	129..	ttgaatattaac	atttgagg
C. Por	cacacttt	acacacgcacggggactgcaagcgggcagcatcgcgatcgtggctccttta	AGACAAACt	CAGAcagacatttttttaaccct---	137..	ttgaatattaac	atttgagg
O. Cun	cacacttt	acacacgcacggggactgcaagcgggcagcatcgcgatcgtggctccttta	AGACAAACt	CAGAcagacatttttttaaccct---	153..	ttgaatattaac	atttgagg
C. Fam	cacacttt	acacacgcacggggactgcaagcgggcagcatcgcgatcgtggctccttta	AGACAAACt	CAGAcagacattttttttttttt---	150..	ttgaatattcac	atttgagg
F. Cat	cacacttt	acacacgcacggggactgcaagcgggcagcatcgcgatcgtggctccttta	AGACAAACt	CAGAcagacatttttttaaccct---	145..	ttgaatattaac	atttgagg
B. Tau	cacacttt	acacacgcacggggactgcaagcgggcagcatcgcgatcgtggctccttta	AGACAAACt	CAGAcagacatttttttaaccct---	145..	ttgaatattaac	atttgagg
E. Cab	cacacttt	acacacgcacggggactgcaagcgggcagcatcgcgatcgtggctccttta	AGACAAACt	CAGAcagacatttttttaaccct---	134..	ttgaatattaac	atttgagg
L. Afr	cacacttt	acacacgcacggggactgcaagcgggcagcatcgcgatcgtggctccttta	AGACAAACt	CAGAcatttttttaaccctcct...	128..	ttgaatattaac	atttgagg
	*****	*****	*****	*****	*****	*****	*****

id=765026 gene=ENSG00000143995 name=MEIS1 segment=chr2.66662301.66662531.1 type=AN

H. Sap	tgctaaag	gtacaattgacc...2905..--taatcatttaaatttgctct	TTTGGTTTt	GTTT	----at	atccaaggcattctatt...43...ctatgtttcag	gtgatggc
R. Mac	tgctaaag	gtacaattgacc...2897..--tacttatttaaatttgctct	TTTGGTTTt	GTTT	----at	atccaaggcattctatt...43...ctatgtttcag	gtgatggc
P. Tro	tgctaaag	gtacaattgacc...2907..--taatcatttaaatttgctct	TTTGGTTTt	GTTT	----at	atccaaggcattctatt...43...ctatgtttcag	gtgatggc
P. Abe	tgctaaag	gtacaattgacc...2895..--taatcatttaaatttgctct	TTTGGTTTt	GTTT	----at	atccaaggcattctatt...43...ctatgtttcag	gtgatggc
C. Jac	tgctaaag	gtacaattgacc...2897..--taatcatttaaatttgctct	TTTGGTTTt	GTTT	----at	atccaaggcattctatt...43...ctatgtttcag	gtgatggc
M. Mus	tgctaaag	gtacaattgacc...2776..actaatccttaa--ttgatct	TTTGGTTTt	GTTT	----gt	atccaaggcattctatt...43...ctatatttcag	gtgatggc
R. Nor	ttcctaag	gtacaattgacc...2928..atcaaatattgaa--ctgctct	TTTGGTTTt	GTTT	----gt	atccaaggcattctatt...43...ctatgtttcag	gtgatggc
C. Por	tgctaaag	gtacaattgacc...2884..--taatcatttaaatttgctct	TTTGGTTTt	GTTT	----at	atccaaggcattctatt...43...ctatgtttcag	gtgatggc
O. Cun	tgctgaag	gtacaattgacc...2992..--taatcatttaa--ttgctct	TTTGGTTTt	GTTT	----at	atccaaggcattctatt...43...ctatgtttcag	gtgatggc
C. Fam	tgctagag	gtacaattgacc...3207..--taatcatttata--ttgctct	TTTGGTTTt	GTTT	----at	atccaaggcattctatt...43...ctatgtttcag	gtgatggc
F. Cat	tgctaaag	gtacaattgacc...2766..--taatcatttata--ttgctct	TTTGGTTTt	GTTT	----at	atccaaggcattctatt...43...ctatgtttcag	gtgatggc
B. Tau	tggtgaag	gtacaattgacc...3145..--tgaatcactgata--ttgctct	TTTGGTTTt	GTTT	----at	atccaaggcattctatt...43...ctatgtttcag	gtgatggc
E. Cab	tgcaaaag	gtacaattgacc...2923..--taatcatttata--ttgctct	TTTGGTTTt	GTTT	----at	atccaaggcattctatt...43...ctatgtttcag	gtgatggc
L. Afr	tgctaaaa	gtacaattgacc...3160..--taatcattttaa--ttgctct	TTTGGTTTt	GTTT	at	atcatatccaaggcatt----.48...ctatgtttcag	gtgatggc
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id=765069 gene=ENSG00000143995 name=MEIS1 segment=chr2.66736256.66739280.1 type=IN VIEW

Figure 818: CS=4.2



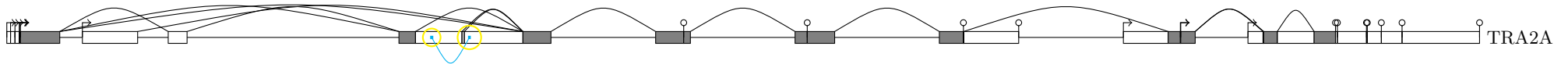
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P.Tro	atgaagtg	gttagtcaacga...	4940...	cgtgcttaaatataacta	aatGTTCTTTTTCCAT	taag	gttaatgt
P.Abe	atgaagtg	gttagtcaacga...	4940...	cgtgcttaaatataacta	aatGTTCTTTTTCCAT	taag	gttaatgt
C.Jac	atgaagtg	gttagtcaacga...	4940...	cgtgcttaaatataacta	aatGTTCTTTTTCCAT	taag	gttaatgt
M.Mus	gtgaagtg	gttagtcaacga...	4940...	cgtgcttaaatataacta	aatGTTCTTTTTCCAT	taag	gttaatgt
R.Nor	gtgaagtg	gttagtcaacga...	4940...	cgtgcttaaatataacta	aatGTTCTTTTTCCAT	taag	gttaatgt
O.Cun	aggaagtg	gttagtcaacga...	4940...	cgtgcttaaatataacta	aatGTTCTTTTTCCAT	taag	gttaatgt
C.Fam	atgaagtg	gttagtcaacga...	4940...	cgtgcttaaatataacta	aatGTTCTTTTTCCAT	taag	gttaatgt
F.Cat	atgaagtg	gttagtcaacga...	4940...	cgtgcttaaatataacta	aatGTTCTTTTTCCAT	taag	gttaatgt
B.Tau	atgaagtg	gttagtcaacga...	4940...	cgtgcttaaatataacta	aatGTTCTTTTTCCAT	taag	gttaatgt
E.Cab	atgaagtg	gttagtcaacga...	4940...	cgtgcttaaatataacta	aatGTTCTTTTTCCAT	taag	gttaatgt
S.Sus	atgaagtg	gttagtcaacga...	4940...	cgtgcttaaatataacta	aatGTTCTTTTTCCAT	taag	gttaatgt
L.Afr	atgaagtg	gttagtcaacga...	4940...	cgtgcttaaatataacta	aatGTTCTTTTTCCAT	taag	gttaatgt
	*****	*****	*	*****	*****	*****	*****

id=559362 gene=ENSG00000164548 name=TRA2A segment=chr7_23562052_23570799_-1 type=IN

H.Sap	aatgaaaa	gtattaaagatcagaaaattaaaattga	ATGGgg	GAAAAAAAtt	GAAC	cagaagattggtcagatagaa...	143...	aatgggtcctag	gttaagta
P.Tro	aatgaaaa	gtattaaagatcagaaaattaaaattga	ATGGgg	GAAAAAAAtt	GAAC	cagaagattggtcagatagaa...	143...	aatgggtcctag	gttaagta
P.Abe	aatgaaaa	gtattaaagatcagaaaattaaaattga	ATGGgg	GAAAAAAAtt	GAAC	cagaagattggtcagatagaa...	143...	aatgggtcctag	gttaagta
C.Jac	aatgaaaa	gtattaaagatcagaaaattaaaattga	ATGGgg	GAAAAAAAtt	GAAC	cagaagattggtcagatagaa...	140...	aatgggtcctag	gttaagta
M.Mus	aatgaaaa	gtattaaagatcagaaaattaaaattg	AATGGgg	GAAAAAAAtt	GAAC	cagaagattggtcagatagaa...	143...	aatgggtcctag	gttaagta
R.Nor	aatgaaaa	gtattaaagatcagaaaattaaaattg	AATGGgg	GAAAAAAAtt	GAAC	cagaagattggtcagatagaa...	144...	aatgggtcctag	gttaagta
O.Cun	aatgaaaa	gtattaaagatcagaaaattaaaattga	ATGGgg	GAAAAAAAtt	GAAC	cagaagattggtcagatagaa...	138...	aatgggtcctag	gttaagta
C.Fam	aatgaaaa	gtattaaagatcagaaaattaaaattga	ATGGgg	GAAAAAAAtt	GAAC	cagaagattggtcagatagaa...	144...	aatgggtcctag	gttaagta
F.Cat	tatgaaaa	gtattaaagatcagaaaattaaaattga	ATGGgg	GAAAAAAAtt	GAAC	cagaagattggtcagatagaa...	144...	aatgggtcctag	gttaagta
B.Tau	aatgaaaa	gtattaaagatcagaaaattaaaattga	ATGGgg	GAAAAAAAtt	GAAC	cagaagattggtcagatagaa...	140...	aatgggtcctag	gttaagta
E.Cab	aatgaaaa	gtattaaagatcagaaaattaaaattg	AATGGgg	GAAAAAAAtt	GAAC	cagaagattggtcagatagaa...	144...	aatgggtcctag	gttaagta
S.Sus	aatgaaaa	gtattaaagatcagaaaattaaaattga	ATGGgg	GAAAAAAAtt	GAAC	cagaagattggtcagatagaa...	143...	aatgggtcctag	gttaagta
L.Afr	aatgaaaa	gtattaaagatcagaaaattaaaattga	ATGGgg	GAAAAAAAtt	GAAC	cagaagattggtcagatagaa...	143...	aatgggtcctag	gttaagta
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id=559364 gene=ENSG00000164548 name=TRA2A segment=chr7_23561751_23561972_-1 type=AN VIEW

Figure 819: CS=3.9



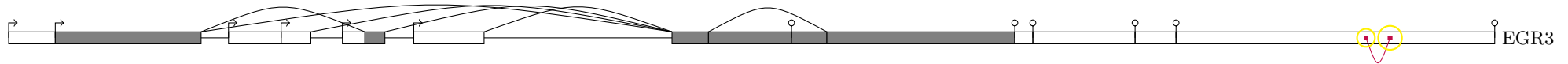
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P. Tro	aatgaaaa	gtattaaagatcagaaaattaaaattgaatgggggaaaaaattgaacagaa	GATTGGTCA	ATAGA	agCACTt	GAATAT	-tttttaaggctat	tttgaa-...111...	aatgggtcctag	gttaagta
P. Abe	aatgaaaa	gtattaaagatcagaaaattaaaattgaatgggggaaaaaattgaacagaa	GATTGGTCA	ATAGA	agCACTt	GAATAT	-tttttaaggctat	tttgaa-...111...	aatgggtcctag	gttaagta
C. Jac	aatgaaaa	gtattaaagatcagaaaattaaaattgaatgggggaaaaaattgaacagaa	GATTGGTCA	ATAGA	agCACTt	GAATAT	-tttttaaggctat	tttgaa-...108...	aatgggtcctag	gttaagta
M. Mus	aatgaaaa	gtattaaagatcagaaaattaaaattgaatgggggaaaaaattgaacagaa	GATTGGTCA	ATAGA	agCACTt	GAATAT	-tttttaaggctat	tttgaa-...111...	aatgggtcctag	gttaagta
R. Nor	aatgaaaa	gtattaaagatcagaaaattaaaattgaatgggggaaaaaattgaacagaa	GATTGGTCA	ATAGA	agCACTt	GAATAT	-tttttaaggctat	tttgaa-...112...	aatgggtcctag	gttaagta
C. Por	aatgaaaa	gtattaaagatcagaaaattaaaattgaatgggggaaaaaattgaacagaa	GATTGGTCA	ATAGA	agCACTt	GAATAT	-tttttaaggctat	tttgaa-...106...	aatgggtcctag	gttaagta
O. Cun	aatgaaaa	gtattaaagatcagaaaattaaaattgaatgggggaaaaaattgaacagaa	GATTGGTCA	ATAGA	agCACTt	GAATAT	-tttttaaggctat	tttgaa-...106...	aatgggtcctag	gttaagta
C. Fam	aatgaaaa	gtattaaagatcagaaaattaaaattgaatgggggaaaaaattgaacagaa	GATTGGTCA	ATAGA	agCACTt	GAATAT	-tttttaaggctat	tttgaa-...112...	aatgggtcctag	gttaagta
F. Cat	tatgaaaa	gtattaaagatcagaaaattaaaattgaatgggggaaaaaattgaacagaa	GATTGGTCA	ATAGA	agCACTt	GAATAT	-tttttaaggctat	tttgaa-...112...	aatgggtcctag	gttaagta
B. Tau	aatgaaaa	gtattaaagatcagaaaattaaaattgaatgggggaaaaaattgaacagaa	GATTGGTCA	ATAGA	agCACTt	GAATAT	-tttttaaggctat	tttgaa-...108...	aatgggtcctag	gttaagta
E. Cab	aatgaaaa	gtattaaagatcagaaaattaaaattgaatgggggaaaaaattgaacagaa	GATTGGTCA	ATAGA	agCACTt	GAATAT	-tttttaaggctat	tttgaa-...112...	aatgggtcctag	gttaagta
S. Sus	aatgaaaa	gtattaaagatcagaaaattaaaattgaatgggggaaaaaattgaacagaa	GATTGGTCA	ATAGA	agCACTt	GAATAT	-tttttaaggctat	tttgaa-...111...	aatgggtcctag	gttaagta
L. Afr	aatgaaaa	gtattaaagatcagaaaattaaaattgaatgggggaaaaaattgaacagaa	GATTGGTCA	ATAGA	agCACTt	GAATAT	-tttttaaggctat	tttgaa-...111...	aatgggtcctag	gttaagta
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id=559364 gene=ENSG00000164548 name=TRA2A segment=chr7_23561751_23561972_-1 type=AN

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P. Tro	aagtaaat	gtatggttt	ATGTTTC	AGTGTCTGT	TGATC	aAGTT	gtagatgaa-tttgcatgatt...212...	cttctttgttag	gagtctcg
P. Abe	aagtaaat	gtatggttt	ATGTTTC	AGTGTCTGT	TGATC	aAGTT	gtagatgaa-tttgcatgatt...212...	cttctttgttag	gagtctcg
C. Jac	aagtaaat	gtatggttt	ATGTTTC	AGTGTCTGT	TGATC	aAGTT	gtagatgaa-tttgcatgatt...212...	cttctttgttag	gagtctcg
M. Mus	aagtaaat	gtatggttt	ATGTTTC	AGTGTCTGT	TGATC	aAGTT	gtagatgaa-tttgcatgatt...213...	cttctttgttag	gagtctcg
R. Nor	aagtaaat	gtatggttt	ATGTTTC	AGTGTCTGT	TGATC	aAGTT	gtagatgaa-tttgcatgatt...213...	cttctttgttag	gagtctcg
C. Por	aagtaaat	gtatggcctt	ATGTTTC	AGTGTCTGT	TGATC	aAGTT	gtagatgaa-tttgcatgatt...212...	cttctttgttag	gagtctcg
O. Cun	aagtaaat	gtatggttt	ATGTTTC	AGTGTCTGT	TGATC	aAGTT	gtagatgaa-tttgcatgatt...213...	cttctttgttag	gagtctcg
C. Fam	aagtaaat	gtatggttt	ATGTTTC	AGTGTCTGT	TGATC	aAGTT	gtagatgaa-tttgcatgatt...213...	cttctttgttag	gagtctcg
F. Cat	aagtaaat	gtatggttt	ATGTTTC	AGTGTCTGT	TGATC	aAGTT	gtagatgaa-tttgcatgatt...213...	cttctttgttag	gagtctcg
B. Tau	aagtaaat	gtatggttt	ATGTTTC	AGTGTCTGT	TGATC	aAGTT	gtagatgaa-tttgcatgatt...212...	cttctttgttag	gagtctcg
E. Cab	aagtaaat	gtatggttt	ATGTTTC	AGTGTCTGT	TGATC	aAGTT	gtagatgaa-tttgcatgatt...213...	cttctttgttag	gagtctcg
S. Sus	aagtaaat	gtatggttt	ATGTTTC	AGTGTCTGT	TGATC	aAGTT	gtagatgaa-tttgcatgatt...208...	cttctttgttag	gagtctcg
L. Afr	aagtaaat	gtatggttt	ATGTTTC	AGTGTCTGT	TGATC	aAGTT	gtagatgaa-tttgcatgatt...214...	cttctttgttag	gagtctcg
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id=559366 gene=ENSG00000164548 name=TRA2A segment=chr7_23561460_23561739_-1 type=AN VIEW

Figure 820:



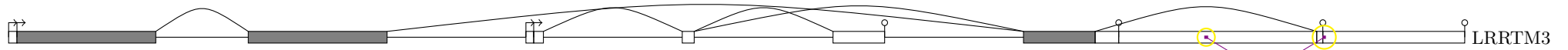
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R. Mac	gggggtaa	ggagcgcaccaa...1997...	gaaagacttttgataaaagt	TGAGTACTTAGA	aaaaagacaaccagatgta...	313...	gtttggcctg--tt-	ttttgtct
P. Tro	gggggtaa	ggagcgcaccaa...1992...	gaaagacttttgataaaagt	TGAGTACTTAGA	aaaaagacaaccagatgta...	312...	gtttggcctg--tt-	ttttgtct
P. Abe	gggggtaa	ggagcgcaccaa...1981...	gaaagacttttgataaaagt	TGAGTACTTAGA	aaaaagacaaccagatgta...	312...	gtttggcctg--tt-	ttttgtct
C. Jac	gggggtaa	ggagcgcaccaa...1991...	gaaagacttttgataaaagt	TGAGTACTTAGA	aaaaagacaaccagatgt--	313...	gtttggcctg--ttt	tctcgtc-
M. Mus	gggggtaa	ggagcgcaccaa...1891...	gaaagacttttgataacagt	TGAGTACTTAGA	aaaaagacaaccagatgtaa...	306...	---tggcctgggtct	ttttgtct
R. Nor	gggggtaa	ggagcgcaccaa...1898...	gaaagacttttgataacagt	TGAGTACTTAGA	aaaagacgaaccagatgtaa...	306...	---tggcctgggtct	ttttgtcc
C. Por	gggggcat	ggagcgcaccaa...1880...	gaaagacttttgataaaagt	TGAGTACTTAGA	aaaagacaaccagatgtaa...	309...	gtttggctg--tt-	ttttgtct
O. Cun	gggggtaa	ggagagcaccga...1657...	gaaagacttttgataaaagt	TGAGTACTTAGA	aaaagacaaccagatgtaa...	320...	gtttggcctg--ct-	ttttgcct
C. Fam	gggggtaa	ggagcgcaccaa...1983...	gaaagacttttgataaaagt	TGAGTACTTAGA	aaaagacaaccagatgtaa...	311...	gtttggcctg--tt-	ttttgtc
F. Cat	gggggtaa	ggagcgcaccaa...1541...	gaaagacttttgataaaagt	TGAGTACTTAGA	aaaagacaaccagatgtaa...	311...	gtttggcctg--tt-	ttttgtct
B. Tau	gggggtaa	ggagcgcaccaa...1976...	gaaagacttttgataaaagt	TGAGTACTTAGA	aaaagacaaccagatgtaa...	332...	-tttgtttt--ttt	ttttgtct
E. Cab	gggggtaa	ggagcgcaccaa...1873...	gaaagacttttgataaaagt	TGAGTACTTAGA	aaaagacaaccagatgtaa...	309...	gtttggcctg--tt-	ttttgcct
S. Sus	gggggtaa	ggagcgcaccaa...2006...	gaaagacttttgataaaagt	TGAGTACTTAGA	aaaagacaaccagatgtaa...	311...	gtttggcctg--gt-	ttttgtct
L. Afr	gggggtaa	ggagcgcaccaa...1860...	gaaagacttttgataaaagt	TGAGTACTTAGA	aaaagacaaccagatgtaa...	313...	-tttggcctg--ttg	ttttgtct
	**** *	**** ***** *	*****	*****	***** *****		** *	* *

id=657380 gene=ENSG00000179388 name=EGR3 segment=chr8_22545172_22547555_-1 type=E3

H. Sap	gggggtaa	ggagcgcaccaa...2059...	ggatgtttttatttcttggat	TTTAtAGTAcCTTA	tactaagggtt-aaaaaaat-	247...	gtttggcctg--tt-	ttttgtct
R. Mac	gggggtaa	ggagcgcaccaa...2060...	ggatgtttttatttcttggat	TTTAtAGTAcCTTA	tactaagggtt-aaaaaaata-	248...	gtttggcctg--tt-	ttttgtct
P. Tro	gggggtaa	ggagcgcaccaa...2055...	ggatgtttttatttcttggat	TTTAtAGTAcCTTA	tactaagggtt-aaaaaaat-	247...	gtttggcctg--tt-	ttttgtct
P. Abe	gggggtaa	ggagcgcaccaa...2044...	ggatgtttttatttcttggat	TTTAtAGTAcCTTA	tactaagggtt-aaaaaaat-	247...	gtttggcctg--tt-	ttttgtct
C. Jac	gggggtaa	ggagcgcaccaa...2055...	ggatgtttttatttcttggat	TTTAtAGTAcCTTA	tactaagggtt-aaaaaaat-	247...	gtttggcctg--ttt	tctcgtc-
M. Mus	gggggtaa	ggagcgcaccaa...1953...	ggatgtttttatttcttggat	TTTAtAGTAcCTTA	tactaagggtt-aaaaaatgc-	242...	---tggcctgggtct	ttttgtct
R. Nor	gggggtaa	ggagcgcaccaa...1960...	ggatgtttttatttcttggat	TTTAtAGTAcCTTA	tactaagggtt-aaaaaatgc-	242...	---tggcctgggtct	ttttgtcc
C. Por	gggggcat	ggagcgcaccaa...1942...	ggatgtttttatttcttggat	TTTAtAGTAcCTTA	tactaagggtt-aaaaaatgct-	245...	gtttggctg--tt-	ttttgtct
O. Cun	gggggtaa	ggagagcaccga...1719...	ggatgtttttatttcttggat	TTTAtAGTAcCTTA	tactaagggttaaaaaatag-	256...	gtttggcctg--ct-	ttttgcct
C. Fam	gggggtaa	ggagcgcaccaa...2045...	ggatgtttttatttcttggat	TTTAtAGTAcCTTA	tactaagggtt-aaaaaaat-	247...	gtttggcctg--tt-	ttttgtc
F. Cat	gggggtaa	ggagcgcaccaa...1603...	ggatgtttttatttcttggat	TTTAtAGTAcCTTA	tactaagggtt-aacaaaaat-	247...	gtttggcctg--tt-	ttttgtct
B. Tau	gggggtaa	ggagcgcaccaa...2038...	ggatgtttttatttcttggat	TTTAtAGTAcCTTA	tactaagggtt-aaaaaaat-	268...	-tttgtttt--ttt	ttttgtct
E. Cab	gggggtaa	ggagcgcaccaa...1935...	ggatgtttttatttcttggat	TTTAtAGTAcCTTA	tactaagggtt-aaaaaatgc-	245...	gtttggcctg--tt-	ttttgcct
S. Sus	gggggtaa	ggagcgcaccaa...2068...	ggatgtttttatttcttggat	TTTAtAGTAcCTTA	tactaagggtt-aaaaaaat-	247...	gtttggcctg--gt-	ttttgtct
L. Afr	gggggtaa	ggagcgcaccaa...1922...	ggatgtttttatttcttggat	TTTAtAGTAcCTTA	tactaagggtt-aaaaaaata-	249...	-tttggcctg--ttg	ttttgtct
	**** *	**** ***** *	*****	*****	*****		** *	* *

id=657380 gene=ENSG00000179388 name=EGR3 segment=chr8_22545172_22547555_-1 type=E3 VIEW

Figure 821:



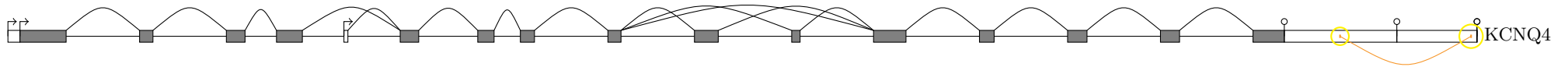
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R.Mac	aaaaatcc	aagattgattca...266...---ttaaattaac-aaaattatt	TCTTgTGTTaTTCAG	agttactcagttttgtaggg...369...gggggaaagcat	ggacaaaa
P.Tro	aaaaatcc	aagattgattca...268...---ttaaattaac-aaaattatt	TCTTgTGTTaTTCAG	agttactcagttttgtaagg...366...gggggaaagcat	ggacaaaa
P.Abe	aaaaatcc	aagattgattca...268...---ttaaattaac-aaaattatt	TCTTgTGTTaTTCAG	agttactcagttttgtaagg...366...gggggaaagcat	ggacaaaa
C.Jac	aaaaatcc	aagattgattca...260...atTTTaaattaac---aattatt	TCTTgTGTTaTTCAG	agttactcagttttgtaggg...370...gggggaaagaat	ggacaaaa
C.Por	aaaaatcc	aagattgattca...258...---ttaaattaac-aaaagtata	TCTTgTGTTaTTCAG	agttactcaatTTTgtaggg...362...gggggaaagcat	ggacaaaa
O.Cun	aaaaatcc	aaggttgattca...272...---ttaaattaac-aaaattatt	TCTTgTGTTcTTCAG	agttactcggttttgtaggg...371...gggggaaagcat	ggacaaat
C.Fam	aaaaatcc	aagatttattca...268...---taaattaacaaaaattatt	TCTTgTGTTaTTCAG	agttactcagttttgtaggg...371...aaggggaaagcat	ggacaaaa
F.Cat	aaaagtcc	aagatttattca...271...---taaattaacaaaaattatt	TCTTgTGTTaTTCAG	agttactcagttttgtaggg...370...aggggaaagcat	ggacaaaa
B.Tau	aaaaatcc	aagattgattca...269...---ttaaattaac-aatattatt	TCTTgTGTTaTTCAG	agttactcagttttgtaggg...374...gggggggggcat	ggacaaaa
E.Cab	caaaatcc	aagattggttca...269...---ttaaattaac-aaaattatt	TCTTgTGTTaTTCAG	agttactcagttttgtaggg...368...gggggaaagcat	ggacaaaa
S.Sus	aaaaatcc	aagattgattca...265...---ttaaattaac-aataattatt	TCTTgTGTTaTTCAG	agttactcagttttgtaggg...370...gggggaaagcat	ggacaaaa
L.Afr	aaaagtcc	aagattgattca...252...---taaattaacaaaaattatt	TCTTgTGTTaTTCAG	agttactcagttttgtaggg...374...tgggagcgggat	ggacaaaa
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id=122038 gene=ENSG00000198739 name=LRRTM3 segment=chr10.68857688.68858400.1 type=A3

H.Sap	gaaagcat	ggacaaaacatca	CTGGAAACA	AAGG ctgt
R.Mac	ggaagcat	ggacaaaacatca	CTGGAAACA	AAGG ctgt
P.Tro	gaaagcat	ggacaaaacatca	CTGGAAACA	AAGG ctgt
P.Abe	gaaagcat	ggacaaaacatca	CTGGAAACA	AAGG ctgt
C.Jac	ggaagaat	ggacaaaacatca	CTGGAAACA	AAGG ctgt
C.Por	ggaagcat	ggacaaaacatca	CTGGAAACA	AAGG ctgt
O.Cun	ggaagcat	ggacaaatcatca	CTGGAAACA	AAGG ccgt
C.Fam	ggaagcat	ggacaaaacatca	CTGGAAACA	AAGG ccgt
F.Cat	ggaagcat	ggacaaaacatca	CTGGAAACA	AAGG ctgt
B.Tau	gggggcat	ggacaaaacatca	CTGGAAACA	AAGG ccgt
E.Cab	ggaagcat	ggacaaaacatca	CTGGAAACA	AAGG ccgt
S.Sus	ggaagcat	ggacaaaacatca	CTGGAAACA	AAGG ccgt
L.Afr	agcgggat	ggacaaaacatca	CTGGAAACA	AAGG ccgt
	* **	*****	*****	***** **

id=122039 gene=ENSG00000198739 name=LRRTM3 segment=chr10.68858401.68858422.1 type=E3 VIEW

Figure 822:



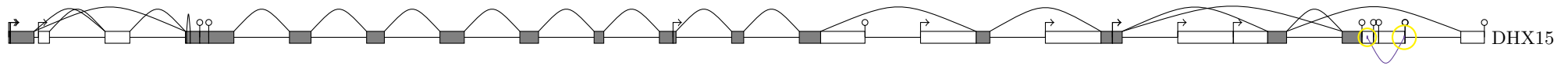
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R. Mac	tggactaa	gggacttctcag...334...ctgaccagcttccagctat	GCAAGGTGAGGTAT	-ctggcccacccttcggacac---	..356...-tcctcctgctgg	gtggccac
P. Tro	tggactga	gggacttctcag...334...ctgaccagcttccagctat	GCAAGGTGAGGT	-ctctggcccacccttcggac-----	..356...-tcctcctgctgg	gtggccac
P. Abe	tggactga	aggacttctcag...331...ctgaccagcttccagctat	GCAAGGTGAGGT	-ctctggcccacccttcggac-----	..356...-tcctcctgctgg	gtggccac
C. Jac	tggactga	gggacttctcag...333...ctgaccagcttccagctat	GCAAGGTGAGGT	TTTG-gcccacccttcggacacagc...	..349...-tcctcctgctgg	atggccac
M. Mus	tggactga	agggttctcag...304...ctgaccagcttctagctat	GCAAGGTGAGGT	ctccaggcccgccttcag-----	..352...-tcttactgctgg	atgtccat
R. Nor	tggactga	agggttctcag...311...cggaccagcttctagctat	GCAAGGTGAGGT	ctccaggcccgccttcag-----	..352...-tcttgctgctgg	atgtccat
C. Por	tggactga	gggacttctcag...332...ctgaccagcttccagctat	GCAAGGTGAGGT	-ctgtggcctgctcttcagac-----	..357...-tcttcctgctgg	atgtccat
O. Cun	tggactga	ggggcttctcag...281...ctgaccagcttccagctat	GCAAGGTGAGGT	-ctcggcctgccccttcggac-----	..355...ctcctccagct-g	gtggccac
C. Fam	tggactga	ggggcttctcag...292...cggaccagcttccagctat	GCAAGGTGAGGT	-ctcggcccgccttcggac-----	..351...-tcctcctgctgg	acgtccac
F. Cat	tggactga	ggggcttctcag...348...ctgaccagcttccagctat	GCAAGGTGAGGT	-ctctggcccgccttcggac-----	..357...-tcttcctgctgg	atgtccac
E. Cab	tggactga	ggggcttctcag...313...ctgaccagcttccagctat	GCAAGGTGAGGT	TTTG--cggccggccttcggacaga--	..351...-ctgcctgctgg	atgtccac
S. Sus	tggactga	ggcgcttctcag...333...ctgaccagcttccagctat	GCAAGGTGAGGT	TTTG-gcccgccttcacccttcgg...	..356...-tcttcctggcag	agggtccc
O. Avi	tggactga	gggtcttctcag...330...ctgaccagcttccagctat	GCAAGGTGAGGT	TTTG-gcccgccttcggacagagc...	..354...cttctcctgcc-a	atgttccac
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id=728535 gene=ENSG00000117013 name=KCNQ4 segment=chr1.41304196.41304961.1 type=EN

H. Sap	-cctgctgg	gtggccactccc...1077...-----cggttctcggata-tgcaagt	ACCTCACTTTGT	taactt-attaacttattggtttcattaaagttttcaagagg	agggtgatt
R. Mac	-cctgctgg	gtggccactccc...1071...---ctcggttctcggata-tgcaa	GTACCTCACTTTGT	taactt-attaacttattggtttcattaaagttttcaatagg	agggtgatt
P. Tro	-cctgctgg	gtggccactccc...1077...-----cggttctcggata-tgcaagt	ACCTCACTTTGT	taactt-attaacttattggtttcattaaagttttcaatagg	agggtgatt
P. Abe	-cctgctgg	gtggccactccc...1077...-----cggttctcggata-tgcaagt	ACCTCACTTTGT	taactt-attaacttattggtttcattaaagttttcaatagg	agggtgatt
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M. Mus	-actgctgg	atgtccattccc...937...-----cggttctcagata-tgcaagt	ACCTCACTTTGT	taactt-attaacttattggtttcattaaagttttcagtagg	aagtgatt
R. Nor	-gctgctgg	atgtccattccc...1704...-----cggttctcagata-tgcaagt	ACCTCACTTTGT	taacttaattaacttattgggtttcattaaagttttcagtagg	aagcgatt
C. Por	-cctgcctg	atgtccatgccc...987...-----cagtccttgata-tgcaagt	ACCTCACTTTGT	taactt-attaacttattggtttcattaaagttttcagtaga	agggtgct
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C. Fam	-cctgctgg	acgtccactccc...1083...-----cgttctcggata-tgcaagt	ACCTCACTTTGT	taactt-attaacttattggtttcattaaagttttcagtagg	agggtggt
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S. Sus	-cctggcag	aggttccccctc...1107...caaccggttctcggata-tg	CAAGTACCTCACTTTGT	taactt-attaacttattgatttcattaaagttttcagtagg	aggcggtt
O. Avi	tcctgcc-a	atgttccactccc...1114...caaccggttctcggata-tg	CAAGTACCTCACTTTGT	taactt-attaacttattgatttcattaaagttttcagtagg	agctggtt
	* *	* *	** ** * * *	***** * ***** * ***** * * *	* * *

id=728536 gene=ENSG00000117013 name=KCNQ4 segment=chr1.41304962.41306123.1 type=EN VIEW

Figure 823: CS=8.4



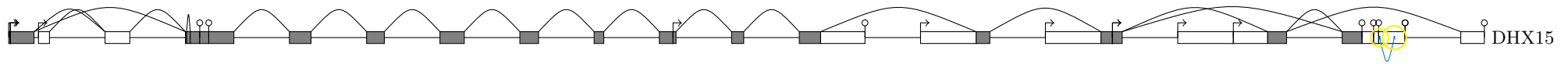
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R. Mac	aactcaaa	agttcgagttgtgctcttcacgttggttcgat	AATGGcCTTTA	TTGAA	-agcttttaatttttctttacagtaaatattccattctgatttcataaattaac	atttatgc
P. Tro	aactcaaa	agttcgagttgtgctcttcacgttggttcgat	AATGGcCTTTA	TTGAA	-agcttttaatttttctttacagtaaatattccattctgatttcataaattaac	atttatgc
P. Abe	aactcaaa	agttcgagttgtgctcttcacgttggttcgat	AATGGcCTTTA	TTGAA	-agcttttaatttttctttacagtaaatattccattctgatttcataaattaac	atttatgc
C. Jac	aactcaaa	agttcaagttgtgctcttcacgttggttcgat	AATGGcCTTTA	TTGAA	-agcttttaatttttctttacagtaaatattccattctgatttcataaattaac	atttatgc
C. Por	aactcaaa	agttcaagttgtgctcttcacgttggttcgat	AATGGcCTTTA	TTGAA	-agcttttaatttttctttacagtaaatattccattctgatttcataaattaac	atttatgc
O. Cun	aactcaaa	agttcaagttgtgctcttcacgttggttcgat	AATGGcCTTTA	TTGAA	-agcttttaatttttctttacagtaaatattccattctgatttcataaattaac	atttatgc
C. Fam	aactgaaa	agttcaagttgtgctcttcacgttggttcgat	AATGGcCTTTA	TTGAA	-agcttttaatttttctttacagtaaatattccattctgatttcataaattaac	atttatgc
B. Tau	aactgaaa	agttcaagttgtgctcttcacgttggttcgat	AATGGcCTTTA	TTGAA	-agcttttaatttttctttacagtaaatattccattctgatttcataaattaac	atttatgc
E. Cab	aactcaaa	agttcaagttgtgctcttcacgttggttcgat	AATGGcCTTTA	TTGAA	-agcttttaatttttctttacagtaaatattccattctgatttcataaattaac	atttatgc
S. Sus	aactcaaa	agttcaagttgtgctcttcacgttggttcgat	AATGGcCTTTA	TTGAA	-agcttttaatttttctttacagtaaatattccattctgatttcataaattaac	atttatgc
O. Avi	aactgaaa	agttcaagttgtgctcttc-tgttggttcgat	AATGGcCTTTA	TTGAA	AGTCtttttaatttttctttacagtaaatattccattctgatttcataaattaac	atttatgc
L. Afr	aactcaaa	agttcaagttgtgctcttcacgttggttcgat	AATGGcCTTTA	TTGAA	-agcttttaatttttctttacagtaaatattccattctgatttcataaattaac	atttatgc
	**** *	*****	*****	*****	*****	*****

id=297909 gene=ENSG00000109606 name=DHX15 segment=chr4_24529383_24529486_-1 type=AN

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R. Mac	ctggaaaa	gtcgatcaatgt...183...--ctcagtcacagaggcactgac	TTCAATAAAGt	CTATTtatact	aattttgg
P. Tro	ctggaaaa	gtcgatcaatgt...183...--ctcagtcacagaggcactgac	TTCAATAAAGt	CTATTtatact	aattttgg
P. Abe	ctggaaaa	gtcgatcaatgt...183...--ctcagtcacagaggcactgac	TTCAATAAAGt	CTATTtatact	aattttgg
C. Jac	ctggaaaa	gtcgatcaatgt...183...--ctcagtcacagaggcactgac	TTCAATAAAGt	CTATTtatact	aattttgg
C. Por	ctggaaaa	gtcgatcaatgt...183...--ctcagtcacagaggcactgac	TTCAATAAAGt	CTATTtatact	aattttgg
O. Cun	ctggaaaa	gtcgatcaatgt...183...--ctcagtcacagaggcactgac	TTCAATAAAGt	CTATTtatact	aattttgg
C. Fam	ctggaaaa	gtcgatcaatgt...183...--ctcagtcacagaggcactgac	TTCAATAAAGt	CTATTtatact	aatttcag
B. Tau	ctggaaaa	gtcgatcaatgt...183...--ctcagtcacagaggcactgac	TTCAATAAAGt	CTATTtatact	aatttcgg
E. Cab	ctggaaaa	gtcgatcaatgt...183...--ctcagtcacagaggcactgac	TTCAATAAAGt	CTATTtatact	aatttcgg
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Figure 824:



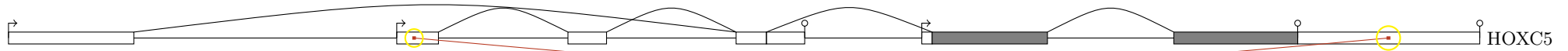
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R. Mac	ctGGAAaa	GTCGAtCAATg	-ttttgcagtttattgaaag...195...tctatttatact	aattttgg
P. Tro	ctGGAAaa	GTCGAtCAATg	-ttttgcagtttattgaaag...195...tctatttatact	aattttgg
P. Abe	ctGGAAaa	GTCGAtCAATg	-ttttgcagtttattgaaag...195...tctatttatact	aattttgg
C. Jac	ctGGAAaa	GTCGAtCAATg	-ttttgcagtttattgaaag...195...tctatttatact	aattttgg
M. Mus	ctGGAAaa	GTCGAtCAATg	-ttttgcagtttattgaaag...195...tctatttatact	aatcttgg
C. Por	ctGGAAaa	GTCGAtCAATg	-ttttgcagtttattgaaag...195...tctatttatact	aattttgg
O. Cun	ctGGAAaa	GTCGAtCAATg	-ttttgcagtttattgaaag...195...tctatttatact	aattttgg
C. Fam	ctGGAAaa	GTCGAtCAATg	-ttttgcagtttattgaaag...195...tctatttatact	aatttcag
B. Tau	ctGGAAaa	GTCGAtCAATg	-ttttgcagtttattgaaag...195...tctatttatact	aatttcgg
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	*****	*****	*****	*****

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P. Tro	ctggaaaa	gtcgcgcaatgt...95...tggtatgcatgatcgttgtaATTGTTGACaTTCC	ttttagaagttgtgaaatgt...64...tctatttatact	aattttgg
P. Abe	ctggaaaa	gtcgcgcaatgt...95...tggtatgcatgatcgttgtaATTGTTGACaTTCC	ttttagaagttgtgaaatgt...64...tctatttatact	aattttgg
C. Jac	ctggaaaa	gtcgcgcaatgt...95...tggtatgcatgatcgttgtaATTGTTGACaTTCC	ttttagaagttgtgaaatgt...64...tctatttatact	aattttgg
M. Mus	ctggaaaa	gtcgcgcaatgt...95...tggtatgcatgatcgttgtaATTGTTGACaTTCC	ttttagaagttgtgaaatgt...64...tctatttatact	aatcttgg
C. Por	ctggaaaa	gtcgcgcaatgt...95...tggtatgcatgatcgttgtaATTGTTGACaTTCC	ttttagaagttgtgaaatgt...64...tctatttatact	aattttgg
O. Cun	ctggaaaa	gtcgcgcaatgt...95...tggtatgcatgatcgttgtaATTGTTGACaTTCC	ttttagaagttgtgaaatgt...64...tctatttatact	aattttgg
C. Fam	ctggaaaa	gtcgcgcaatgt...95...tggtatgcatgatcgttgtaATTGTTGACaTTCC	ttttagaagttgtgaaatgt...64...tctatttatact	aatttcag
B. Tau	ctggaaaa	gtcgcgcaatgt...95...tggtatgcatgatcgttgtaATTGTTGACaTTCC	ttttagaagttgtgaaatgt...64...tctatttatact	aatttcgg
E. Cab	ctggaaaa	gtcgcgcaatgt...95...tggtatgcatgatcgttgtaATTGTTGACaTTCC	ttttagaagttgtgaaatgt...64...tctatttatact	aatttcgg
S. Sus	ctggaaaa	gtcgcgcaatgt...96...tggtatgcatgatcgttgtaATTGTTGACaTTCC	ttttagaagttgtgaaatgt...64...tctatttatact	aattttgg
O. Avi	ctggaaaa	gtcgcgcaatgt...95...tggtatgcatgatcgttgtaATTGTTGACaTTCC	ttttagaagttgtgaaatgt...64...tctatttatact	aattttgg
L. Afr	ctggaaaa	gtcgcgcaatgt...95...tggtatgcatgatcgttgtaATTGTTGACaTTCC	ttttagaagttgtgaaatgt...64...tctatttatact	aattttgg
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id=297911 gene=ENSG00000109606 name=DHX15 segment=chr4_24529100_24529336_-1 type=AN VIEW

Figure 825:



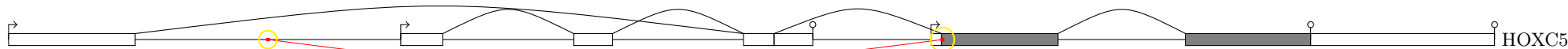
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R. Mac	gacaaacc	cacaatatatttacatcatatataatcttaactgtccagccacgcagctg	CTGGTGag	GTTTAATGCT	AGGA	cagagggcctggcagttaga...	57...	caggcgaacgct	gtgagtta
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M. Mus	gacaaacc	cacaatatatttacatcatatataatcttaactgtccagccacgcagctg	CTGGTGag	GTTTAATGCT	AGGA	cagagggcctggcagttaga...	57...	caggcgaacgct	gtgagtta
R. Nor	gacaaacc	cacaatatatttacatcatatataatcttaactgtccagccacgcagctg	CTGGTGag	GTTTAATGCT	AGGA	cagagggcctggcagttaga...	57...	caggcgaacgct	gtgagtta
C. Por	gacaaacc	cacaatatatttacatcatatataatcttaactgtccagccacgcagctg	CTGGTGag	GTTTAATGCT	AGGA	cagagggcctggcagttaga...	65...	caggcgaacgct	gtgagtta
O. Cun	gacaaacc	cacaatatatttacatcatatataatcttaactgtccagccacgcagctg	CTGGTGag	GTTTAATGCT	AGGA	cagagggcctggcagttaga...	56...	caggcgaacgct	gtgagtta
C. Fam	gacaaacc	cacaatatatttacatcatatataatcttaactgtccagccacgcagctg	CTGGTGag	GTTTAATGCT	AGGA	cagagggcctggcagttaga...	55...	caggcgaacgct	gtgagtta
B. Tau	gacaaacc	cacaatatatttacatcatatataatcttaactgtccagccacgcagctg	CTGGTGag	GTTTAATGCT	AGGA	cagagggcctggcagttaga...	57...	caggcgaacgct	gtgagtta
E. Cab	gacaaacc	cacaatatatttacatcatatataatcttaactgtccagccacgcagctg	CTGGTGag	GTTTAATGCT	AGGA	cagagggcctggcagttaga...	57...	caggcgaacgct	gtgagtta
S. Sus	gacaaacc	cacaatatatttacatcatatataatcttaactgtccagccacgcagctg	CTGGTGag	GTTTAATGCT	AGGA	cagagggcctggcagttaga...	57...	caggcgaacgct	gtgagtta
L. Afr	gacaaacc	cacaatatatttacatcatatataatcttaactgtccagccacgcagctg	CTGGTGag	GTTTAATGCT	AGGA	cagagggcctggcagttaga...	57...	caggcgaacgct	gtgagtta
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id=595898 gene=ENSG00000198353 name=HOXC5 segment=chr12.54431638_54431798.1 type=AN

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P. Tro	ttctctct	tcctctcacctt...	298...	ccccctctttccttaggcc	TTTTGCATT	gaAAATg	CACCAG	gggaggttagtgagggggaa...	317...	gaattagtntta	cgtcaatg
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M. Mus	ctctctct	tcctctgcttc...	347...	cccctctctttccttaggcc	TTTTGCATT	gaAAATg	CACCAG	gggaggttagtgagggggaa...	312...	gaattagtntta	cgtcaatg
R. Nor	ttctctct	tcctctgcttc...	325...	ccccctctttccttaggcc	TTTTGCATT	gaAAATg	CACCAG	gggaggttagtgagggggaa...	321...	gaattagtntta	cgtcaatg
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O. Cun	ttctctct	tcctcccactt...	288...	ccccctctttccttaggcc	TTTTGCATT	gaAAATg	CACCAG	gggaggttagtgagggggaa...	313...	gaattagtntta	cgtcaatg
C. Fam	ttctctct	tcctcccactt...	324...	ccccctctttccttaggcc	TTTTGCATT	gaAAATg	CACCAG	gggaggttagtgagggggaa...	313...	gaattagtntta	cgtcaatg
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E. Cab	ttctctct	tcctcccactt...	302...	ccccctctttccttaggcc	TTTTGCATT	gaAAATg	CACCAG	gggaggttagtgagggggaa...	318...	gaattagtntta	cgtcaatg
S. Sus	ttctctct	tcctcccactt...	305...	ccccctctttccttaggcc	TTTTGCATT	gaAAATg	CACCAG	gggaggttagtgagggggaa...	318...	gaattagtntta	cgtcaatg
L. Afr	ttctctct	tcctcccactt...	299...	ccccctctttccttaggcc	TTTTGCATT	gaAAATg	CACCAG	gggaggttagtgagggggaa...	323...	gaattagtntta	cgtcaatg
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Figure 826:



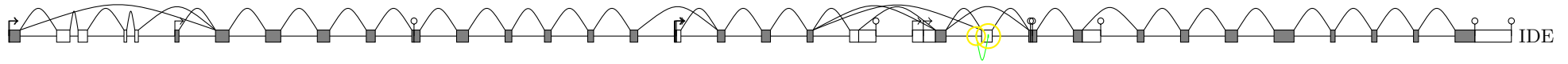
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P. Tro	agcgctcg	gtaagtgtttcc...4828...	-atagggcatggccttctatgtg	AATTTA	GGAGT	ttGAAA	cttttggagggtatttatgt...80...	agctgacaaacc	cacaatat
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R. Nor	agcgccc	gtaagtgtttcc...4828...	-ataggaaggccttctatgtg	AATTTA	GGAGT	ttGAAA	cttttggagggtatttatgt...80...	agctgacaaacc	cacaatat
C. Por	agcgccc	gtaagtgtttcc...4828...	-atagggcatgcttctatgtg	AATTTA	GGAGT	ttGAAA	cttttggagggtatttatgt...80...	agctgacaaacc	cacaatat
O. Cun	agcgccc	gtaagtgtttcc...4828...	-ctagggcatggccttctacgtg	AATTTA	GGAGT	ttGAAA	cttttggagggtatttatgt...80...	agctgacaaacc	cacaatat
C. Fam	agcgccc	gtaagtgtttcc...4828...	-atacgcacggccttctatgtg	AATTTA	GGAGT	ttGAAA	cttttggagggtatttatgt...80...	agctgacaaacc	cacaatat
B. Tau	agcgccc	gtaagtgtttcc...4828...	-atacgcacggccttctatgtg	AATTTA	GGAGT	ttGAAA	cttttggagggtatttatgt...80...	agctgacaaacc	cacaatat
E. Cab	agcgccc	gtaagtgtttcc...4828...	-atacgcacggccttctatgtg	AATTTA	GGAGT	ttGAAA	cttttggagggtatttatgt...80...	agctgacaaacc	cacaatat
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id=595897 gene=ENSG00000198353 name=HOXC5 segment=chr12.54411199_54431637_1 type=I5

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R. Mac	tatggagc	agaaaaacgacaaagcgagaaaaattat	TTTC	ACTCC	ag	AAATT	aat
P. Tro	tatggagc	agaaaaacgacaaagcgagaaaaattat	TTTC	ACTCC	ag	AAATT	aat
P. Abe	tatggagc	agaaaaacgacaaagcgagaaaaattat	TTTC	ACTCC	ag	AAATT	aat
C. Jac	tatggagc	agaaaaacgacaaagcgagaaaaattat	TTTC	ACTCC	ag	AAATT	aat
M. Mus	tatggagc	agaaaaacgacaaagcgagaaaaattat	TTTC	ACTCC	ag	AAATT	aat
R. Nor	tatggagc	agaaaaacgacaaagcgagaaaaattat	TTTC	ACTCC	ag	AAATT	aat
C. Por	tatggagc	agaaaaacgacaaagcgagaaaaattat	TTTC	ACTCC	ag	AAATT	aat
O. Cun	tatggagc	agaaaaacgacaaagcgagaaaaattat	TTTC	ACTCC	ag	AAATT	aat
C. Fam	tatggagc	agaaaaacgacaaagcgagaaaaattat	TTTC	ACTCC	ag	AAATT	aat
B. Tau	tatggagc	agaaaaacgacaaagcgagaaaaattat	TTTC	ACTCC	ag	AAATT	aat
E. Cab	tatggagc	agaaaaacgacaaagcgagaaaaattat	TTTC	ACTCC	ag	AAATT	aat
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Figure 827:



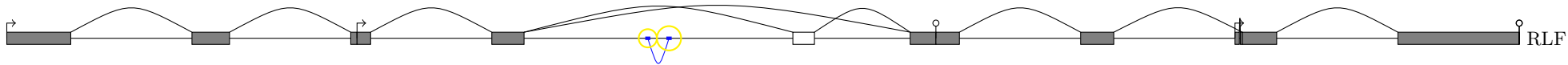
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M. Mus	ggatgtat	gtaagtaccac...360...cttagaagtcagatcacgag	GCTGCATATcc	ATACTCTT	cggtcatgtttcttcattac...38...tctttttgtag	tcgctacc	
R. Nor	ggatgtat	gtaagtaccac...350...tcttagagtcagatcacgag	GCTGCATATcc	ATACTCTT	cggtcatgtttcttcattac...39...tctttctgtag	tcgctaca	
C. Por	ggatgtat	gtaagtaccac...354...ctagaaatccaaatcatgag	GCTGCATATcc	ATACTCTT	cggtcatgtttcttcattac...40...tctttttgtag	tcgctaca	
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R. Nor	tctgttag	tcgctacattta...42...gttattgaaggatgatttaa	AAGAGTATac	ATATGCAGC	acgcctctcagggttgagctatggcattgcatcaggaatgaatgcaatactt	gtaagtaa
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E. Cab	tttgtag	tcgctacattta...42...gttattgaaggatgatttaa	AAGAGTATac	ATATGCAGC	acgcctctcagggttgagctatggcattgcatcaggaatgaatgcaatactt	gtaagtaa
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L. Afr	tttgtag	tcgctacattta...42...gttattgaaggatgatttaa	AAGAGTATac	ATATGCAGC	acgcctctcagggttgagctatggcattgcatcaggaatgaatgcaatactt	gtaagtaa
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Figure 828: CS=3.9



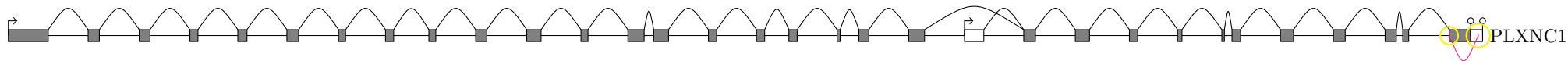
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L. Afr	agaagaag	gtaagcctcaaa...4842...-aaggcattagtaatatgtgt	AAAAGGGTTCT	TGGTCAAATC	agtttaggaacattggg	---tt-----	..53...tttttttctag	gactatct
	** ****	*** * **	* * *	***** *****	** * * **	*	** * *****	** *****

id=477620 gene=ENSG0000117000 name=RLF segment=chr1_40661437_40667599_1 type=IN

H. Sap	ggaggaag	gtaagtcttaag...4926...-----ttattgcaggactgttcaga	GATTGACCAAGGA	atCCTTTTT	ttttctag	gactatct
R. Mac	agaggaag	gtaagtcttaag...4920...--ttttctttattgcaggactg	TTCAGAGATTGACCAAGGA	atCCTTTTT	ttttctag	gactatct
P. Tro	ggaggaag	gtaagtcttaag...4926...-----ttattgcaggactgttcaga	GATTGACCAAGGA	atCCTTTTT	ttttctag	gactatct
P. Abe	ggaggaag	gtaagtcttaag...4926...-----ttattgcaggactgttcaga	GATTGACCAAGGA	atCCTTTTT	ttttctag	gattatct
C. Jac	agatgaag	gtaagtcttaag...4926...-----ttattgcaggactgttcaga	GATTGACCAAGGA	atCCTTTTT	ttttctag	gactatct
M. Mus	agaggaag	gtaagtcttaac...4927...-----tcattgcaggactgttcaga	GATTGACCAAGGA	atCCTTTTT	ttttctag	gactatct
R. Nor	agaggaag	gtaagtcttaac...4926...-----tcattgcaggactgttcaga	GATTGACCAAGGA	atCCTTTTT	ttttctag	gactatct
C. Por	agaagaag	gtacgtttttaa...4926...-----ttttattgcattgactgttcaga	GATTGACCAAGGA	atCCTTTTT	ttttctag	gactatct
C. Fam	agaagaag	gtaagcctcaaa...4920...--ttttctttattgcaggactg	TTCAGAGATTGACCAAGGA	atCCTTTTT	ttttctag	gactatct
F. Cat	agaagaag	gtaagcctcaaa...4920...--ttttctttattgcaggactg	TTCAGAGATTGACCAAGGA	atCCTTTTT	ttttctag	gactatct
B. Tau	agaagaag	gtaagcctcaaa...4918...agttttcttcattgcaggactg	TTCAGAGATTGACCAAGGA	atCCTTTTT	ttttctag	gactatct
E. Cab	agaagaag	gtaagcctcaaa...4920...--ttttctttattgcaggactg	TTCAGAGATTGACCAAGGA	atCCTTTTT	ttttctag	gactatct
S. Sus	agaagaag	gtaagcctcaaa...4920...--ttttctttattgcaggactg	TTCAGAGATTGACCAAGGA	atCCTTTTT	ttttctag	gactatct
S. Sus	agaagaag	gtaagcctcaaa...4920...--ttttctttattgcaggactg	TTCAGAGATTGACCAAGGA	atCCTTTTT	ttttctag	gactatct
O. Avi	agaagaag	gtaagcctcaaa...4918...agttttcttcattgcaggactg	TTCAGAGATTGACCAAGGA	atCCTTTTT	ttttctag	gactatct
L. Afr	agaagaag	gtaagcctcaaa...4920...--ttttctttattgcaggactg	TTCAGAGATTGACCAAGGA	atCCTTTTT	ttttctag	gactatct
	** ****	*** * **	* *****	*****	** *****	** *****

id=477620 gene=ENSG0000117000 name=RLF segment=chr1_40661437_40667599_1 type=IN VIEW

Figure 829: CS=14.4



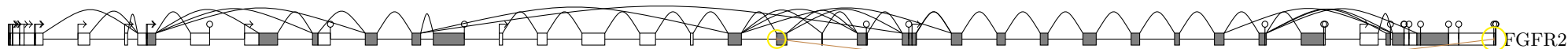
H. Sap	ttgatgag	gtaagatttta...1079...accacaatatctaaaataac	TGTTCTaaTTGTcAACAG	attctaaa
R. Mac	ttgatgag	gtaagatttta...1100...accacaatatctaaaataac	TGTTCTaaTTGTcAACAG	attctaaa
P. Tro	ttgatgag	gtaagatttta...1081...accacaatatctaaaataac	TGTTCTaaTTGTcAACAG	attctaaa
P. Abe	ttgatgag	gtaagatttta...1076...accacaatatctaaaataac	TGTTCTaaTTGTcAACAG	attctaaa
C. Jac	ttgatgag	gtaagatttta...1087...accacaatatctaaaataac	TGTTCTaaTTGTcAACAG	attctaaa
M. Mus	ttgatgag	gtaagttgcttt...1075...actctaataatgtaaaataac	TGTTCTaaTTGTcAACAG	attctaaa
R. Nor	ttgatgag	gtaagttgcttt...1037...actctaataatgtaaaataac	TGTTCTaaTTGTcAACAG	attctaaa
C. Por	ttgatgag	gtaagctttttac...1082...accacaatatctaaaataac	TGTTCTaaTTGTcAACAG	attctaaa
O. Cun	ttgatgag	gtaagattttat...1128...accacaatatctaaaataac	TGTTCTaaTTGTcAACAG	attctaaa
C. Fam	ttgatgag	gtaagattttta...1099...accacaatatctaaaataac	TGTTCTaaTTGTcAACAG	attctaaa
F. Cat	ttgatgag	gtaagatttta...1130...atcacaatatctaaaataac	TGTTCTaaTTGTcAACAG	attctaaa
B. Tau	ttgatgag	gtaagatttta...1036...accacaatatctaaaataac	TGTTCTaaTTGTcAACAG	attctaaa
O. Avi	ttgatgag	gtaagattttca...1033...gccacaatatctaaaataac	TGTTCTaaTTGTcAACAG	attctaaa
L. Afr	ttgatgag	gtaagatttta...1155...accgcaatatctaaaataac	TGTTCTaaTTGTcAACAG	attctaaa
	*****	***** * *	*****	*****

id=443279 gene=ENSG00000136040 name=PLXNC1 segment=chr12_94697828_94698956.1 type=IN

H. Sap	agaaagc-a	taccaacccttg...47...ggttggttgcaaacagcc-tcc	TGTTtACAGAGAATA	caaggccagtaagcgaatgtcagattg--taactacagtctcc---acttaagcacia	tgatataa
R. Mac	aaaaagc-a	taccaaccattg...47...ggttggttgcaaacagtc-tcc	TGTTtACAGAGAATA	cagggccagtaagcgaatgtcagattg--taactacagtctcc---acttaagcacia	tgatataa
P. Tro	agaaagc-a	taccaacccttg...47...ggttggttgcaaacagcc-tcc	TGTTtACAGAGAATA	cagggccagtaagcgaatgtcagattg--taactacagtctcc---acttaagcacia	tgatataa
P. Abe	agaaagc-a	taccaacccttg...47...ggttggttgcaaacagcc-tcc	TGTTtACAGAGAATA	cagggccagtaagcgaatgtcagattg--taactacagtctcc---acttaagcacia	tgatataa
C. Jac	agaaagc-a	taccaaccactg...47...ggttggttgcaaacagcc-tcc	TGTTtACAGAGAATA	cagggccagtaagcgaatgtcagattg--taactacagtctcc---acttaagcacia	tgatataa
M. Mus	-gaaagcgt	tatcaaccactg...47...ggttggttgcaaacagcc-tcc	TGTTtACAGAGAATA	cagggccagtaagcgaatgtcagattg--taactacagtctcc---acttaagcacia	tgatataa
R. Nor	-gaaagcgt	tatcaaccactg...46...ggttggttgcaaacagcc-tcc	TGTTtACAGAGAATA	cagggccagtaagcgaatgtcagattg--taactacagtctcc---acttaagcacia	tgatataa
C. Por	agtaagc-g	tagcaccactg...47...ggttggttgcaaacagcc-tcc	TGTTtACAGAGAATA	cagggccagtaagcgaatgtcagattg--taactacagtctcc---acttaagcacia	tgatataa
O. Cun	agaaagc-a	tagcaccactg...45...ggttggttgcaaacagcc-tcc	TGTTtACAGAGAATA	cagggccagtaagcgaatgtcagattg--taactacagtctcc---acttaagcacia	tgatataa
C. Fam	agaaagc-a	aaccaaccactg...47...ggttggttgcaaacagcc-tcc	TGTTtACAGAGAATA	cagggccagtaagcgaatgtcagattg--taactacagtctcc---acttaagcacia	tgatataa
F. Cat	agaaagc-a	taccaaccctgt...46...ggttggttgcaaacagcc-tcc	TGTTtACAGAGAATA	cagggccagtaagcgaatgtcagattg--taactacagtctcc---acttaagcacia	tgatataa
B. Tau	agaaagc-c	tatcaaccactg...47...ggttggttgcaaacagcc-tcc	TGTTtACAGAGAATA	cagggccagtaagcgaatgtcagattg--taactacagtctcc---acttaagcacia	tgatataa
O. Avi	-gaaagcgt	tatcaaccactg...48...-ggttggttgcaaacagcc-tcc	TGTTtACAGAGAATA	cagggccagtaagcgaatgtcagattg--taactacagtctcc---acttaagcacia	tgatataa
L. Afr	agaaagc-a	gaccaaacattg...36...ggttggttgcaaacagtc-tcc	TGTTtACAGAGAATA	cagggccagtaagcgaatgtcagattg--taactacagtctcc---acttaagcacia	tgatataa
	****	* * *	***** * * * * *	***** * * * * *	**** * * * * *

id=443281 gene=ENSG00000136040 name=PLXNC1 segment=chr12_94699226_94699374.1 type=E3 VIEW

Figure 830:



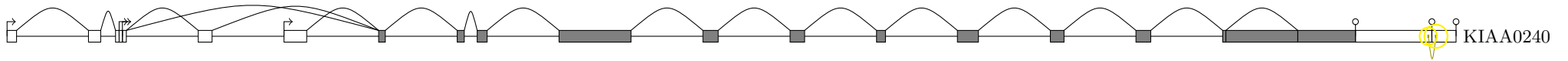
H.Sap	ttctcaag	gtgaggactttc...1105...	gccgttatattgttctcctg	TGCTGTGTTctAG	CActcggg
R.Mac	ttctcaag	gtgaggactttc...1077...	gccgttatattgttctcctg	TGCTGTGTTctAG	CActcggg
P.Tro	ttctcaag	gtgaggactttc...1090...	gccgttatattgttctcctg	TGCTGTGTTctAG	CActcggg
P.Abe	ttctcaag	gtgaggactttc...1094...	gccattatattgttctcctg	TGCTGTGTTctAG	CActcggg
C.Jac	ttctcaag	gtgaggcctttc...1068...	gccgttatattgttctcctg	TGCTGTGTTccAG	CActcggg
M.Mus	tcctgaag	gtgagaactttc...1033...	gccgttatattgttttccta	TGCTGTGTTctAG	CActcggg
C.Por	ttctgaag	gtgagtactttc...1355...	gccgttatattgttctccta	TGCTGTGTTctAG	CActcggg
O.Cun	tactcaag	gtgaggactttc...1286...	gccgttatattgttctcctg	TGCTGTGTTctAG	CActcggg
C.Fam	ttctcaag	gtgaggactttc...1079...	gccgttatattgttctcctg	TGCTGTGTTccAG	CActcggg
F.Cat	ttctgaag	gtgaggactttc...1060...	gccgttatattgttctcctg	TGCTGTGTTccAG	CActcggg
B.Tau	ttctgaag	gtgagcaagttc...1069...	gccgttatattgttctcctg	TGCTGTGTTccAG	CActcggg
S.Sus	ttctgaag	gtgagtatggcc...1339...	gccgtcatattgttctcctg	TGCTGTGTTctAG	CActcagg
L.Afr	ttctcaag	gtgaggactttc...1091...	gccttatattgttctcctg	TGCTGTGTTccAG	CActcggg
	* ** **	*****	*	*** * ***** * **** ***** **	***** **

id=599607 gene=ENSG0000066468 name=FGFR2 segment=chr10.123278344.123279492_-1 type=IN

H.Sap	ggggaaaa	tgaagttttgat...665...	aatgtttctac-agatattaa	TGTTAACAaGA	CAaaataa
R.Mac	ggggaaaa	tgaagttttgat...667...	aatgtttctac-agatattaa	TGTTAACAaGA	CAaaataa
P.Tro	ggggaaaa	tgaagttttgat...665...	aatgtttctac-agatattaa	TGTTAACAaGA	CAaaataa
P.Abe	ggggaaaa	tgaagttttgat...665...	aatgtttctac-agatattaa	TGTTAACAaGA	CAaaataa
C.Jac	ggggaaaa	tgaagttttgat...819...	-atgtttctacaagatattaa	TGTTAACAaGA	CAaaataa
M.Mus	ggggaaaa	tggtgttttgat...640...	aatgtttctac-agatattaa	TGTTAACAaGA	CAaaataa
C.Por	ggagaaaa	tgaagtttcaat...654...	aatgtttctac-agatattaa	TGTTAACAaGA	CAaaataa
O.Cun	ggagaaag	tgaagttttgat...617...	aatgtttctac-agatattaa	TGTTAACAaGA	CAaaataa
C.Fam	ggggaaaa	tgaagttttgat...664...	aatgtttctac-agatattaa	TGTTAACAaGA	CAaaataa
F.Cat	ggggaaaa	tgaagttttgat...662...	aatgtttctac-agatattaa	TGTTAACAaGA	CAaaataa
B.Tau	gggggaag	tgaagttttggt...667...	aatgtttctac-agatattaa	TGTTAACAaGA	CAaaataa
S.Sus	ggggaaaa	tgaagttttggt...660...	aatgtttctac-agatattaa	TGTTAACAaGA	CAaaataa
L.Afr	gggggaa	tgaagtttgaat...648...	aatgtttctac-tgatattaa	TGTTAACAaGA	CAaaataa
	** * *	** **** *	*****	*****	*****

id=599651 gene=ENSG0000066468 name=FGFR2 segment=chr10.123237878.123238585_-1 type=EN VIEW

Figure 831: CS=19.24



```

R. Mac cccggtgcccctgtgtccca-...1088...tgtatagtagtctcacttgAAATTGCTTTGTATACaTTTTgtaaaaatattataaatgttttgtaaaaaaa
P. Abe cccagtgcccctgtgtccca-...1086...tgtatagtagtctcacttgAAATTGCTTTGTATACaTTTTgtaaaaatattctctcacatgttttgtaaaaaaa
C. Jac ccccatgcccctttgtccca-...1078...tgtatagtagtctcacttgAAATTGCTTTGTATACaTTTTgtaaaaatattataaatgttttgtaaaaaaa
M. Mus tttttaccctctgtgtccac-...1000...tgtatagtagtctcacttgAAATTGCTTTGTATACaTTTTgtaaaaatattataaatgttttgtaaaaaaa
C. Por ccctgccccccactcaccg-...1439...tgtatagtagtctcacttgAAATTGCTTTGTATACaTTTTGTAAaAATAttataaatgttttgtaaaaaaa
O. Cun ctccctgcccctctgtccca-...1119...tgtatagtagtctcacttgAAATTGCTTTGTATACaTTTTGTAAaAATAttataaatgttttgtaaaaaaa
C. Fam ccctgtccctctctgcccc-...1110...tgtatagtagtctcacttgAAATTGCTTTGTATACaTTTTGTAAaAATAttataaatgttttgtaaaaaaa
F. Cat ctccctgcccctctgtccct-...1089...tgtatagtagtctcacttgAAATTGCTTTGTATACaTTTTGTAAaAATAttataaatgttttgtaaaaaaa
B. Tau ctgctgccccttagtgccc-...1090...tgtatagtagtctcacttgAAATTGCTTTGTATACaTTTTGTAAaAATAttataaatgttttgtaaaaaaa
E. Cab tctcctgcccctttgtccta-...1087...tgtatagtagtctcacttgAAATTGCTTTGTATACaTTTTGTAAaAATAttataaatgttttgtaaaaaaa
S. Sus ctccccgccccttcatcccc-...1053...tgtatagtagtctcacttgAAATTGCTTTGTATACaTTTTGTAAaAATAttataaatgttttgtaaaaaaa
O. Avi ctgctgcccctt-gtgccct-...1095...tgtatagtagtctcacttgAAATTGCTTTGTATACaTTTTGTAAaAATAttataaatgttttgtaaaaaaa
L. Afr gtccttgccaccctgcccgg-...1212...tgtatagtagtctcacttgAAATTGCTTTGTATACaTTTTGTAAaAATAttataaatgttttgtaaaaaaa
** * ***** * * * *****

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id=650788 gene=ENSG00000112624 name=KIAA0240 segment=chr6.42834967.42836128.1 type=E3

```

R. Mac tgttttgtaaaaaaaa-AAAAGTATaACAAAttGCAGTTTattttgttatggttgataaa...104...tttgggaaaatgtgcaactg
P. Abe tgttttgtaaaaaaaa-AAAAGTATaACAAAttGCAGTTTattttgttatggttgataaa...104...tttgggaaaatgtgcaactg
C. Jac tgttttgtaaaaaaaa-AAAAGTATaACAAAttGCAGTTTattttgttatggttgataaa...104...tttgggaaaatgtgcaactg
M. Mus tgttttgtaaaaaaaaAAAAGTATaACAAAttGCAGTTTattttgttatggttgataaa...99...tttgggaaaatgtgcaactg
C. Por t-----GTTTTGTaaAAAAaaGTATaACAAAttGCAGTTTattttgttatggttgataaa...105...tttgggaaaatgtgcaactg
O. Cun t-----GTTTTGTaaAAAAaaGTATaACAAAttGCAGTTTattttgttatggttgataaa...104...tttgggaaaatgtgcaactg
C. Fam t-----GTTTTGTaaAAAAaaGTATaACAAAttGCAGTTTattttgttatggttgataaa...104...tttgggaaaatgtgcaaatg
F. Cat t-----GTTTTGTaaAAAAaaGTATaACAAAttGCAGTTTattttgttatggttgataaa...105...tttgggaaaatgtgcaactg
B. Tau t-----GTTTTGTaaAAAAaaGTATaACAAAttGCAGTTTattttgttatggttgataaa...104...tttgggaaaatgtgcaactg
E. Cab t-----GTTTTGTaaAAAAaaGTATaACAAAttGCAGTTTattttgttatggttgataaa...104...tttgggaaaatgtgcaactg
S. Sus t-----GTTTTGTaaAAAAaaGTATaACAAAttGCAGTTTattttgttatggttgataaa...104...tttgggaaaatgtgcaactg
O. Avi t-----GTTTTGTaaAAAAaaGTATaACAAAttGCAGTTTattttgttatggttgataaa...104...tttgggaaaatgtgcaactg
L. Afr t-----GTTTTGTaaAAAAaaGTATaACAAAttGCAGTTTattttgttatggttgataaa...104...tttgggaaaatgtgcaactg
* ** ***** ** ** * * **

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id=650789 gene=ENSG00000112624 name=KIAA0240 segment=chr6.42836129.42836296.1 type=E3 VIEW

Figure 832: